

# *Lands and Peoples*

T H E   W O R L D   I N   C O L O R



VOLUME VII

THE GROLIER SOCIETY

NEW YORK

TORONTO



Copyright © 1956, 1955, 1954, 1953, 1952, 1951, 1949, 1948, 1946, 1943, 1941, 1940, 1938

by THE GROLIER SOCIETY INC.

Library of Congress Catalog Card Number: 56-5009

Copyright 1932, 1930, 1929 by THE GROLIER SOCIETY

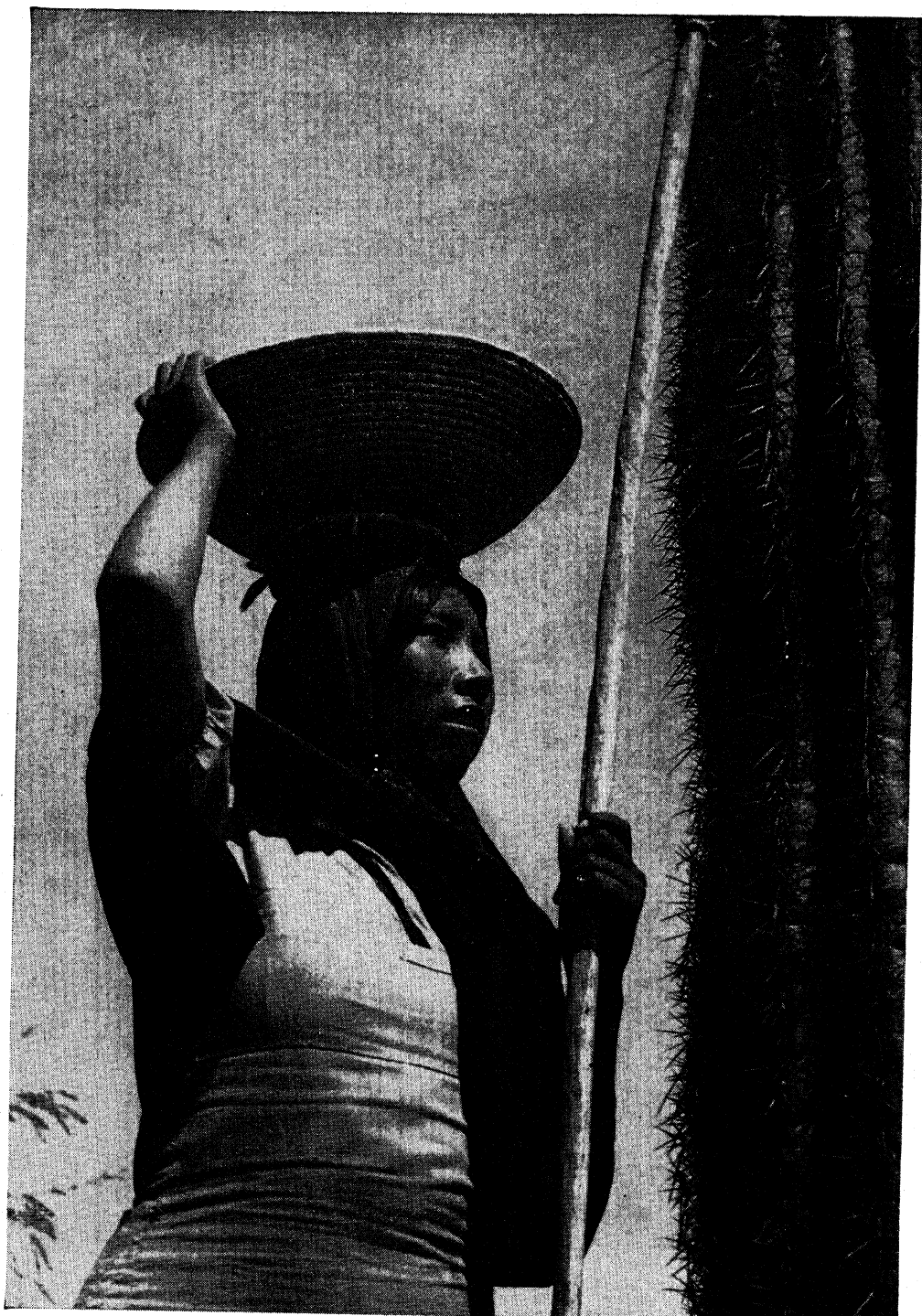
Copyright © 1956, 1955, 1954, 1953, 1952, 1951 by THE GROLIER SOCIETY OF CANADA LIMITED



# Volume VII

## TABLE OF CONTENTS

	PAGE
THE PAGEANT OF MODERN MEXICO— <i>Color and Contrast in the Land of the Aztec</i>	
4 Pages in Full Color .. .. .	4
THROUGH SIX REPUBLICS— <i>Mixed Races of Central America</i>	
4 Pages in Full Color .. .. .	25
THE PEARL OF THE ANTILLES— <i>Rich Tropical Beauty of Romantic Cuba</i>	
6 Pages in Full Color .. .. .	43
THE INDIES OF THE WEST— <i>Islands and Islanders of the Caribbean Sea</i>	
2 Pages in Full Color .. .. .	61
THE CRADLE OF THE NEW WORLD— <i>Haiti and the Dominican Republic</i>	84
THE LANDS OF EL DORADO— <i>Riches of Venezuela and the Three Guianas</i>	94
IN THE ANDES— <i>Two Countries of the Mighty Mountain Range</i> .. ..	105
THE LAND OF THE INCAS— <i>Historic Highlands of Bolivia and Perú</i>	
6 Pages in Full Color .. .. .	116
THE LONG, THIN COUNTRY— <i>Chile—from the Tropics to Cape Horn</i>	
2 Pages in Full Color .. .. .	133
SOUTH AMERICAN GIANT— <i>Brazil—Land of Great Cities and Green Jungles</i>	
8 Pages in Full Color .. .. .	148
PARAGUAY— <i>Where Yerba Mate and Quebracho Grow</i> .. .. .	170
URUGUAY— <i>The Purple Land</i> .. .. .	183
THE SILVER LAND— <i>Life in Argentina, on Pampas and in Cities</i>	
8 Pages in Full Color .. .. .	199
THE GREAT WHITE SOUTH— <i>Antarctica Is the Coldest Corner of the Earth</i>	221
THE UNITED NATIONS— <i>Hope of Men of Good Will</i> .. .. .	237
THE RACES OF MANKIND— <i>Their Differences and Their Similarities</i> ..	241
RELICS OF ANCIENT MAN— <i>Our Inheritance from Long-vanished Races</i>	
8 Pages in Full Color .. .. .	249
CRAFT, ANCIENT AND MODERN— <i>How Men Navigate River, Lake and Sea</i>	
5 Pages in Full Color .. .. .	265
HATS AND THEIR WEARERS— <i>Man's Devices for Covering His Head</i>	
7 Pages in Full Color .. .. .	283
GIPSIES IN MANY LANDS— <i>The Ways of Nomad and Vagrant Folk</i>	
4 Pages in Full Color .. .. .	297
FAR FROM THE IRON ROADS— <i>How People Travel in Out-of-the-way Lands</i>	
2 Pages in Full Color .. .. .	307
THE STRENGTH OF RUNNING WATER— <i>How Rivers Shape the Land</i>	
7 Pages in Full Color .. .. .	317
THE GREAT WASTE LANDS— <i>Glimpses of the Regions Forsaken by Man</i>	
3 Pages in Full Color .. .. .	331
THE WONDER OF THE WATERFALL— <i>Scenes of the Thundering Waters</i>	
4 Pages in Full Color .. .. .	343
SPINNERS AND WEAVERS— <i>Folk Who Practice Man's Oldest Handicrafts</i>	
4 Pages in Full Color .. .. .	353
MY LORD THE ELEPHANT— <i>His Marvelous Strength in Work or Play</i>	
4 Pages in Full Color .. .. .	368
THE FIRE MOUNTAINS— <i>How Volcanoes Act as the Earth's Safety Valves</i>	
4 Pages in Full Color .. .. .	385
COMPLETE LIST OF COLOR PLATES .. .. .	393
COMPLETE ALPHABETICAL INDEX .. .. .	399



BLACK STAR

**ONLY IN DRESS DOES THIS SERI WOMAN DIFFER FROM HER ANCESTORS**

Members of Coronado's exploring party saw stalwart Indian women like this one when, four hundred years ago, they marched across what is now the northern Mexican state of Sonora.

# THE PAGEANT OF MODERN MEXICO

## *Color and Contrast in the Land of the Aztec*

The Republic of Mexico is a land of strange extremes. The very landscape is rich in contrast, ranging from the dry cactus plains along the Rio Grande to the lush jungles on the Guatemalan border. Though a mountainous country, it is surprisingly fertile and produces crops as different as wheat and rubber. Its mineral wealth is abundant and amazing. Cortes found gold and silver. More modern treasure-seekers have discovered oil and precious strategic minerals. Once a land of haughty aristocrat and lowly peon, Mexico has made great strides toward welding her modern peoples into a true democracy.

THE wheels of progress have rolled swiftly over modern Mexico, and their tracks are marked by epic changes. But in spite of changes and the quickened pace of its life, Mexico remains a land of startling contrasts. It is still a land where the thatched hut of the poor man leans against the palace, where the traditions of Aztec and haughty *hidalgo* exist side by side with progressive, twentieth-century ideas.

Perhaps nowhere in Mexico is the contrast between the old and the new more evident and more concentrated than it is in Mexico City. The nation's beautiful capital lies in the high Valley of Mexico with its encircling volcanoes, the highest of which are snow-covered Popocatepetl (Mountain of Smoke) and Ixtaccihuatl (The White Woman).

Almost overnight, it seems, the city has spread out on every side to accommodate its fast-growing population. Today it is one of the largest cities in the Americas. Solid new avenues of houses have sprung up in what were a short time ago fields of corn and maguey. To meet the demands of its rapid expansion, the city has speeded the building of new water mains, power lines, schools, playgrounds and parks. Handsome new business centers have been developed. In the city's heart skyscrapers now rise above the old red-stone churches and palaces of colonial days.

A magnificent new garden avenue cuts through the entire city, from Guadalupe Hidalgo on the north (the old religious capital of Mexico) to Tlalpam (The

Place of Flowers and Water) on the south. It slices through the Pedregal, where a vast new university city is rising, and leads to a modern highway over the lofty sierras to the flowering resort city of Cuernavaca.

All this sudden metropolitan growth, however, has been according to a master plan developed years ago, so that "The City of Palaces" has lost none of its grace and beauty. The new architecture is an attractive blending of the ultramodern, Spanish-Moorish, and Aztec and Mayan motifs. Much of it employs the *texonite* or pink lava used by the Aztecs and early Spanish builders.

The Zocalo, the city's old central plaza, has preserved much of its colonial appearance. Ringing it about are the great Cathedral (one of the largest churches in the Western Hemisphere), the rose-colored National Palace of Cortes, the tiled City Hall and other mellowed colonial buildings with their sidewalk cafés and sunny balconies. From the Zocalo, the narrower streets of this old part of the city lead past numerous churches, many of which are tilted because they rest upon uncertain subsoil, to the Alameda, the spacious central park. Here are graceful shade trees, tiled benches, fountains and statuary.

Super-modern though parts of Mexico City may be, the picturesque ways of old Mexico are ever present. Just around the corner from the finest, newest hotels can be found canvas-covered, open-air eating places that serve big red ollas or pots of *chile con carne*, beans, tortillas, tamales



and other typically Mexican foods.

The busy, noisy markets display native woven goods in competition with the products of modern mills. Stalls are gay with bright blue and gold rebozos or shawls and brilliant red or blue or many-hued serapes. There are native handicrafts in abundance—carved leather goods, handmade shoes and sandals, green and blue glassware, fine pottery from Oaxaca and Guadalajara, highly glazed talavera ware from Puebla. As of old, merchant and buyer bargain good-naturedly over even the smallest purchase.

Mexico City's flower markets are aglow with a thousand shades and colors. Everything can be bought there, from forget-me-nots to huge cart-wheel funeral wreaths, and strange tropical blossoms vie with more familiar flowers.

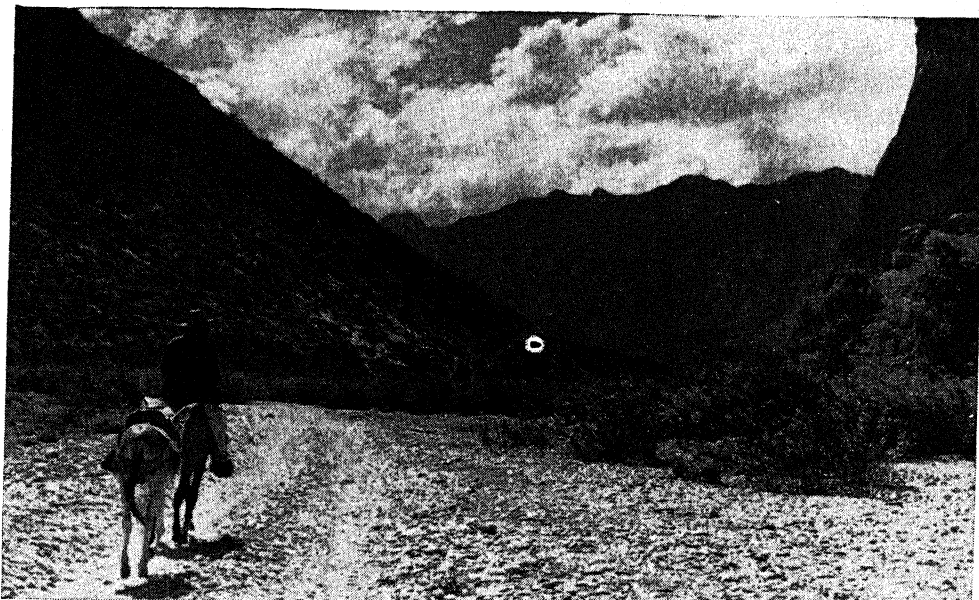
On the city streets, peddlers of fruits and candy, feather-work, baskets, brushes and other small articles still sing out their wares—the world's most ancient form of advertising. Delivery boys still carry their loads balanced on their heads.

Women still prefer bright shawls and scarves to hats.

Mexico's striking contrasts are by no means limited to Mexico City or to any one particular region. Few countries have such extremes of geography and climate. There is an amazing variety of scenery—vast mountains and valleys, great lakes, dense jungles, desert land, strange and bizarre vegetation. Climates range from the cold of frozen heights to the steaming heat of lowland jungles—from *tierra fria* to *tierra caliente*. Rainfall in some of the jungle states is four hundred inches a year. In some northern parts of the country, scarcely any rain falls from one end of the year to the other.

Such differences in altitude and climate make possible the growing of all kinds of cereals, from wheat to rice, and every kind of fruit known to the Western Hemisphere, including many unknown anywhere outside Mexico.

The low, warm valleys are spread green with sugar cane and rice, and there cotton and henequen flourish. A little higher up



BLACK STAR

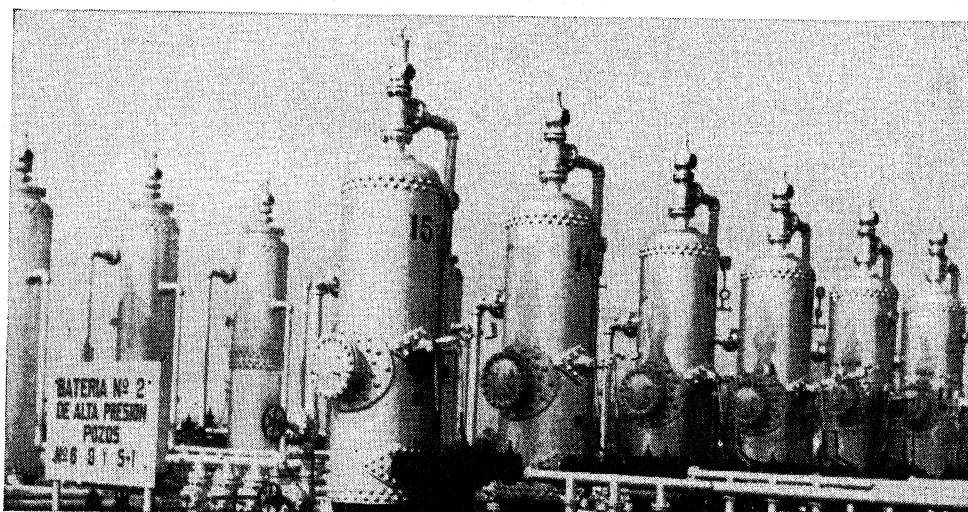
#### A CANYON ROAD NEAR MONTERREY, IN THE SIERRA MADRE ORIENTAL

Unpaved and rocky, the road winds through Huasteca Canyon. It is in the northern foothills of the Sierra Madre Oriental, the mountain range on the east edge of the central plateau.

on the slopes, as in the Valle Nacional in the state of Vera Cruz, high-quality tobacco is grown. Higher still on the slopes come the red coffee berries, protected by shade trees. Mexican coffee is among the finest produced in Latin

America. Nearly all of it that is not used for domestic consumption is bought by England. Corn grows in nearly every altitude in Mexico, and especially in small, well-watered valleys.

The plains of northern Mexico and the



BLACK STAR

#### INDUSTRIAL PROGRESS BRINGS CHANGES TO THE MEXICAN SKYLINE

It is likely that until a few years ago nothing more imposing than a thatched hut stood here. Now the silvery, cylindrical tanks of a gas separating unit rise above the land.





PRESTON

### THE CATHEDRAL OVERLOOKS THE ZOCALO, THE HEART OF MEXICO CITY

An Aztec temple, destroyed by Cortes, once stood on or near the site of the cathedral. It is about the plaza called the Zocalo that the city's commercial and political life centers.

luxuriant southern valleys are fine grazing land for the country's great cattle herds.

Mexico is an ancient land. It is dotted with the remains of the Aztecs, Mayas and other peoples who lived there untold centuries before the Spaniards came. Some of its ancient languages have survived the passage of time. About thirteen native languages and more than sixty dialects are still spoken. Few tongues sound more melodious than Aztec, which is still the language of millions.

Chief among the peoples native to early Mexico were the Mayas of southeast Mexico, and their descendants still occupy that region. They were the ancient builders of the magnificent temples and palaces of Uxmal, Chichen Itza, Palenque and other jungle sites that stretch all the way to Honduras in Central America. Besides being extraordinary builders and carvers of stone, the ancient Mayas de-

vised a calendar more accurate than the one we use today.

To the north of the Maya region, in the Valley of Mexico, dwelt another group of great builders, the Toltecs, who were later conquered by the warlike Aztecs. The Toltecs erected the great pyramids to the sun and moon at San Juan Teotihuacan (The Place of the Gods). To these pyramids, with their steep stone staircases and various terrace levels, the Aztecs added the Pyramid of Quetzalcoatl (The Plumed Serpent) and flanked its stairway with coiled feathered serpents of stone. Near the three pyramids are ruins of a once great city. The original colored frescoes can still be seen on some of the walls of its buildings.

In southeast Mexico, between the Aztecs and the Mayas, lived the Mixtecs and Zapotecs, also mighty builders and sculptors and workers in precious metals.

## THE PAGEANT OF MODERN MEXICO

East of Oaxaca City is Mitla, where powerful stone columns and beautiful inlaid stonework tell of the skill of these ancient builders. A short distance away to the west, along the rim of a hill, extend the massive fortress walls of Monte Alban, built to protect temples and pyramids.

Most of Mexico's more than seven hundred known archaeological sites have yet to be excavated. They constitute a great untouched storehouse of culture and knowledge. Some of them may conceal treasures of gold and silver and jewelry as did the tombs of Monte Alban.

No one knows the exact age of Mexico's ancient cities, although science is beginning to unravel the mystery by the radio-carbon dating method. Mexico City was founded in 1325 according to Aztec codices, or records, and is thus a comparatively recent city. On its site the wandering Aztec tribes found an eagle perched on a cactus; from the eagle's beak dangled a serpent. This was the sign, said the priests, that here was the spot where the Aztecs should found the center of their empire-to-be. The site lay in the swamps of one of five large lakes that in those days filled the floor of the Valley of Mexico. The first settlers drove poles into the mud as supports for their thatched huts.

By the time Hernando Cortes entered the Aztec capital in 1519, it had become a beautiful stone city with temples and palaces and a population of two hundred thousand people. Just its market place alone, said one early writer, was larger than most Spanish cities. Four great causeways, wider than modern avenues, rayed out from its central square. Its streets were canals filled with the busy traffic of canoes and larger vessels.

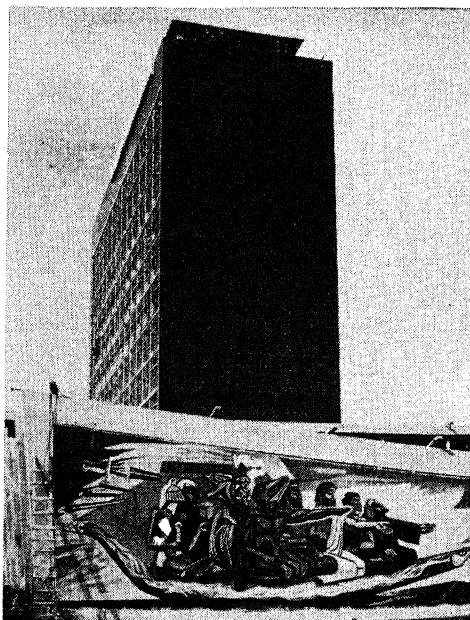
After their conquest of the capital, the Spaniards razed much of the city and filled its canals with rubble. It was not until the middle of the nineteenth century that the city regained its original number of inhabitants.

Though they were only a handful of men, the conquering Spaniards—the conquistadors—had horses and firearms, which gave them tremendous advantages over the Aztec warriors. Also to their

advantage was the surprise and awe caused by the appearance from over the sea of an unknown race of different-colored skin.

The conquistadors soon overran the empire of the Aztecs, which at that time extended from Arizona and California far down into Central America. Only the mountain-dwelling Tlaxcalans had managed to remain more or less independent of Aztec rule. In these valiant, freedom-loving people, who had long hated the Aztecs, the Spaniards found valuable allies. By their aid, the conquest and plunder of the Aztec Empire was greatly facilitated.

The Spanish invasion was not all plunder, however. Spain brought Western civilization to Mexico and spread it through her hard-working priests and missionaries. During the early colonial period, heavy-walled churches rose in nearly every village of the land. Many of them still stand, bold and beautiful, a delight to the eye. Some of the larger ones are among the most beautiful architectural

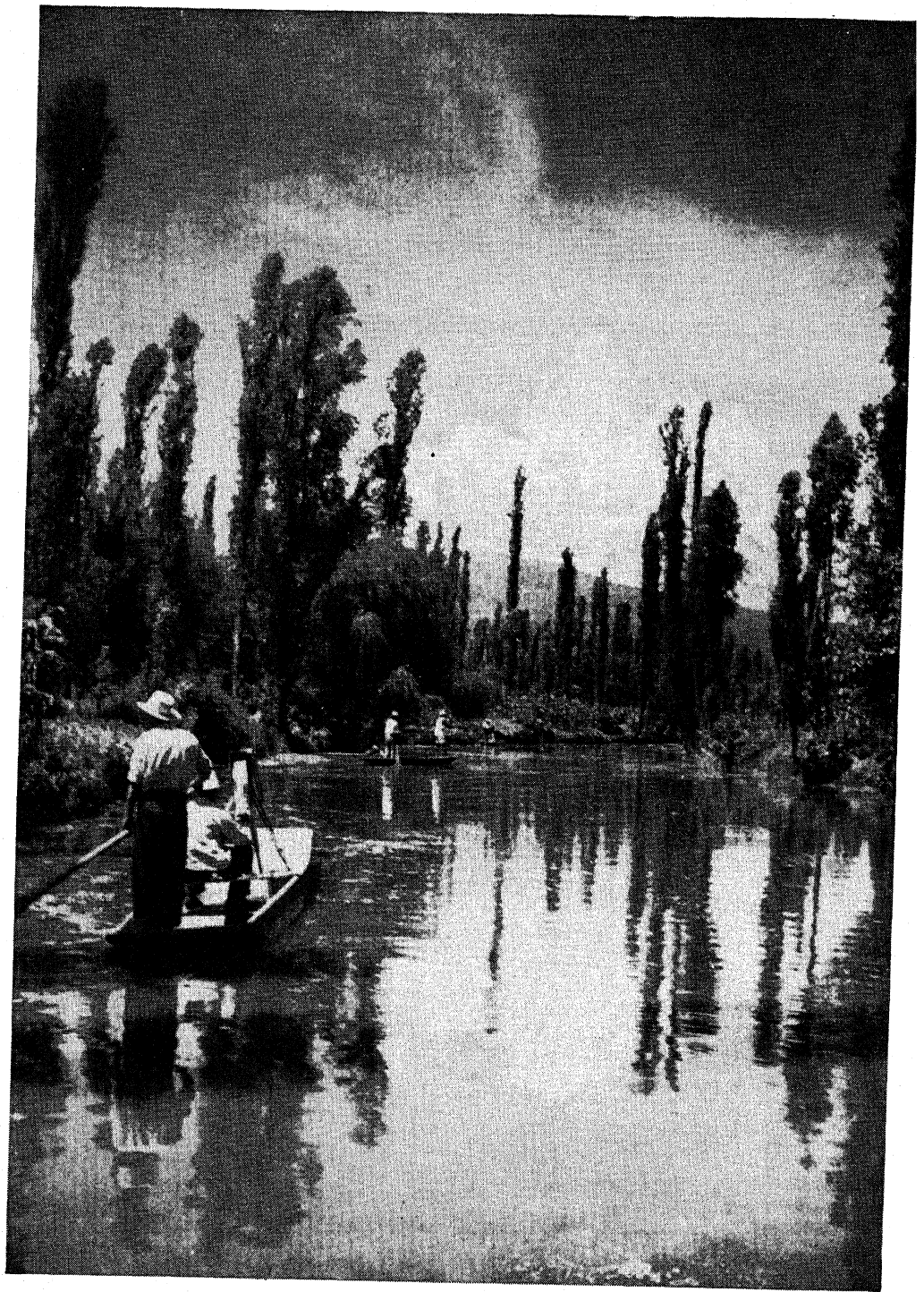


LUIS ROJAS DE LA TORRE

### ART AND ARCHITECTURE COMBINE

When completed, this mural by the painter Chavez Morado will grace a public building.





BLACK STAR

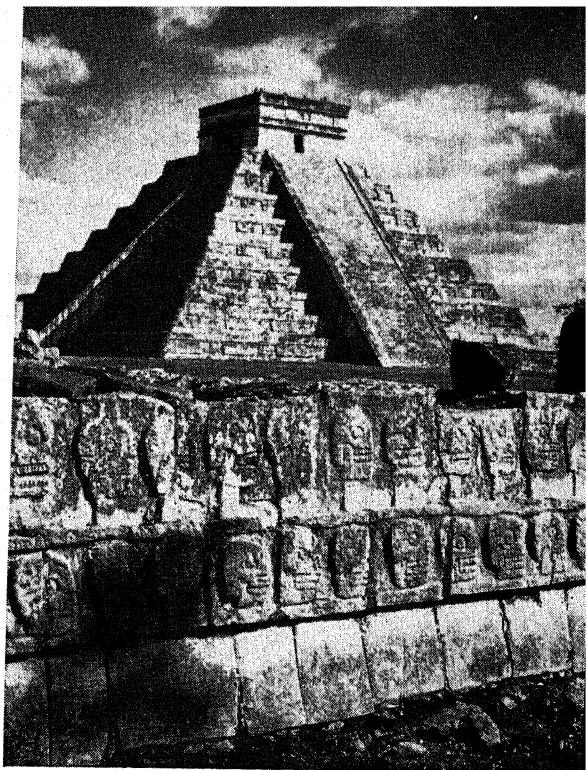
### THE FLOATING GARDENS OF XOCHIMILCO, "THE PLACE OF FLOWERS"

The gardens, thick with trees, shrubs, creepers and flowers, were founded on islands of interlaced twigs covered with earth. They are connected by a network of placid canals.

structures ever produced. The interiors are often lavishly adorned with ornate stone and wood carving, statuary and delicate gold and silver work.

Often the towns in which the churches stand are themselves monuments to those rich days when the land belonged to Spain. Some towns have changed their appearance hardly at all since then. Taxco, high in the mountains southwest of Mexico City, retains all the colorful flavor of older times, and its citizens are careful to preserve its colonial atmosphere. Guanajuato is another town that retains much of its old picturesque charm.

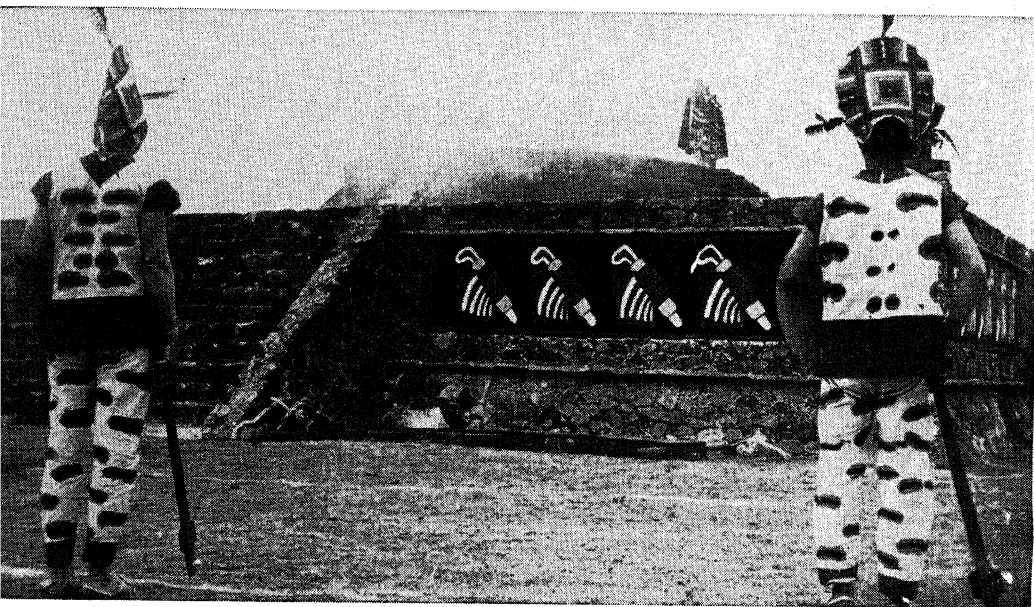
The day finally came when the Mexicans, no longer content with Spanish rule, thirsted to be free and independent. Their first revolts against the mother country were led by two parish priests, Hidalgo and Morelos, both of whom were captured and executed. Independence was finally won through the leadership of Augustin Iturbide, a former Crown general who went over to the revolters. All ties with Spain were definitely severed in 1822. Iturbide, however, soon grew arrogant,



BLACK STAR

#### AT CHICHEN ITZA, A MAYAN CITY

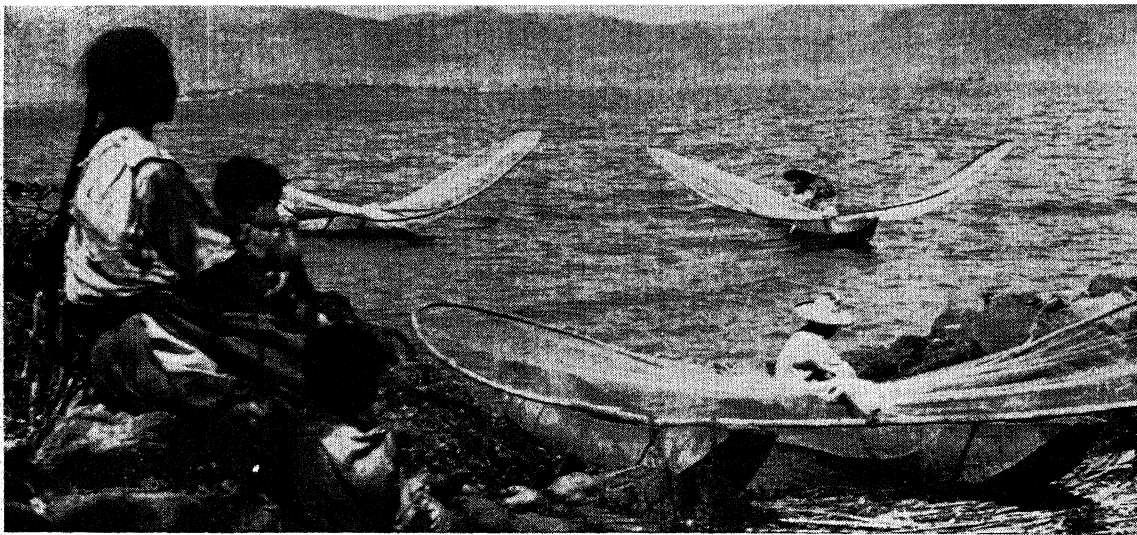
A stepped pyramid of the ancient Mayas looms bold and impressive against the Yucatan sky.



WIDE WORLD

#### PRESENT-DAY MEXICANS RE-ENACT AN AZTEC CEREMONY OF LONG AGO

Dressed in costumes resembling those of their Aztec ancestors, a pair of modern "warriors" watch as a "priest" performs a rite atop one of the pyramids at San Juan Teotihuacan.



NATIONAL RAILWAYS OF MEXICO

### THE GOSSAMERLIKE NETS OF FISHERMEN SKIM OVER LAKE PATZCUARO

When lifted free of the water the broad nets look very much like the outspread wings of giant butterflies. The narrow boats of the Indian fishermen are dugouts carved from logs.

overthrew democratic government and declared himself Emperor of Mexico. After a brief, harsh reign, he was driven into exile. When he tried to return, he was promptly executed.

A tumultuous period followed. Texas seceded from Mexico in 1836. Defeat in the war with the United States cost Mexico half her national territory—the vast area north of the Rio Grande, including California. Before that, Mexico had been the third largest independent country in the world.

Defeat also brought fresh internal disorders. Civil strife resulted in the more modern constitution of 1857, but it left the way open for a French invasion and conquest. The French seated Archduke Maximilian of Austria and his wife Carlotta on the Mexican throne. However, the rule of France was brief, and when the French withdrew from Mexico in 1867, Maximilian was shot.

The long series of disorders ended with the stern rule of General Porfirio Diaz, who governed Mexico as a virtual dictator for thirty years. By bringing a great deal of foreign capital into the country, Diaz helped to modernize Mexico. Railroads were built, mining was expanded, a telegraph system was created. Unfortunately this general progress was not matched by an equal growth of popular liberties.

Small landowners had their land stolen from them and the common people were reduced to serfdom or peonage.

In 1910 Francisco Madero, an idealistic member of a wealthy Mexican family, led a revolt based on a program of land reform and liberation of the serfs. Diaz fled to Europe in 1911. There followed a prolonged period of civil war and destruction ending in 1917 when a new constitution was adopted. This provided for democratic suffrage, the breaking up of large estates and an end of serfdom, protective labor legislation and the nationalization of Mexico's vast oil resources.

This last proviso resulted in a conflict with the British and American oil companies which had invested huge sums in Mexico's oil fields. In 1938 the Mexican Government took over the oil industry. The dispute was finally settled in 1941 with a nominal payment being made to the companies, and for a time Mexican oil production fell off sharply. Today, however, Mexico ranks as one of the chief oil producers in the world. New, rich fields have been brought in, particularly in the Isthmus of Tehuantepec, pipelines have been laid and several huge refineries have been built.

Although the revolution that ended in 1917 was costly in lives, money and property, it made internal order possible for

## THE PAGEANT OF MODERN MEXICO

Mexico. It also laid the groundwork and provided the background for the tremendous progress seen in Mexico today—progress in agriculture, industry, transportation, education, medicine and the creative arts.

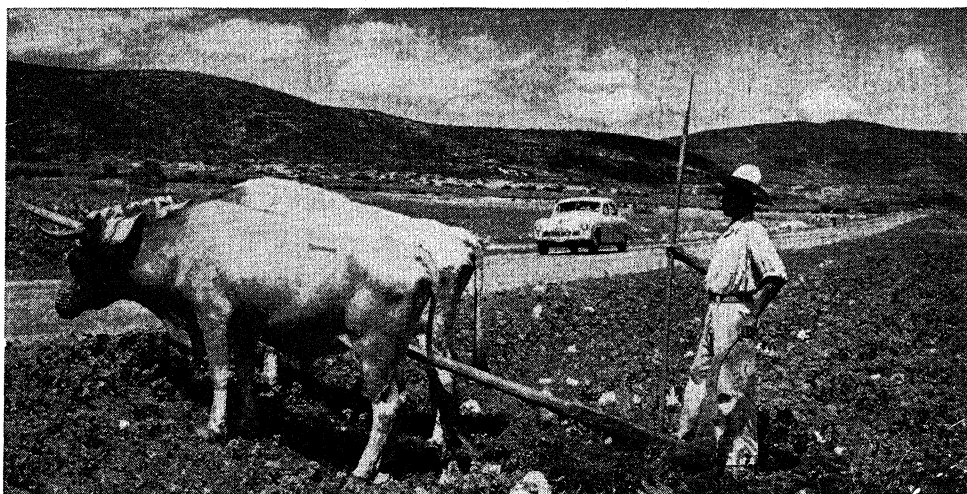
After the great estates were broken up and the land distributed among the small farmers, Mexico's agricultural output went into a serious decline. The newly freed people lacked tools, knowledge, capital, and seeds to produce good crops. The scarcity of low-priced food for the large cities became a national problem.

Many of Mexico's agricultural troubles have been adjusted in recent years. National factories are turning out farming implements. Farmers and farm leaders are being educated. Better health and sanitary conditions for man and livestock are being developed. Part of this work is done at Mexico's fine national farm school at Chapingo, a village near Mexico City. Enormous hydroelectric projects now irrigate millions of acres of land that were once dry and unsuitable for cultivation. Experimental farms have been set up in regions typical of Mexico's varied topography, climate and rainfall. Tractors and other mechanical equipment cultivate the soil of the larger plantations.

A program for improving corn quality and yield has developed a new hybrid corn from native and foreign strains. The new corn—called Rockmex—is ideal for growing under Mexican conditions; it resists disease, requires little water, and is sturdy under hot or highland climates. By its use, corn yield has been increased from a pitiful ten to twenty bushels an acre to one prize-winner's record of well over a hundred bushels. Poor people have been educated to accept the new corn and are taught how to plant it for the highest possible yield. Mexico has now ceased to be the corn-importing land it had been for more than seventy years. As far as corn is concerned, the country has been put on a self-sufficient food basis. Experiments are under way to improve other farm products, particularly Mexican beans or frijoles, a mainstay of Mexican diet.

A great area in the foothills of the states of Tamaulipas and Nuevo Leon—land never before cultivated—has been cleared for orange, grapefruit and lemon and lime groves. It is probably the world's greatest single, compact citrus fruit area.

In spite of these great agricultural strides, many parts of Mexico remain undeveloped and old Indian methods of cultivation are still practiced. On remote



BLACK STAR

### THE NEW AND THE OLD MEET ALONG THE PAN AMERICAN HIGHWAY

Modern automobile traffic speeds past a primitive plow pulled by a team of oxen. When it is fully completed, the highway will pass through seventeen of the Latin American republics.



## THE PAGEANT OF MODERN MEXICO

hillside tracts there are farmers who still use the most primitive of all agricultural tools, a pointed stick, to make a hole for each hand-sown corn seed.

Industrial growth, particularly since the 1940's, has been enormous and rapid. Mexico now has one of the world's largest Celanese factories, great automobile-assembly plants, factories that make steel products, rubber products, adding machines, electrical goods and shoes, to mention only a few. There are important chemical and drug plants, and the larger ones maintain fine research laboratories.

Silver used to be the chief product of Mexican mines, and for three hundred years Mexico led the world in its production. It was so plentiful that one colonial *hidalgo* is said to have paved the street to the church with white silver for the wedding of one of his children. Mexico

still produces about 40 per cent of the world's silver. Besides the old Spanish mines at Guanajuato, Taxco and Pachuca (now worked with modern machinery), rich new silver deposits have been discovered and are worked in Zacatecas, Chihuahua and other northern states.

Today silver is far less important than new strategic metals and minerals, such as lead, zinc, copper, antimony, arsenic, mercury, amorphous graphite and molybdenum, which are being worked on an ever increasing scale as new deposits are discovered.

Mexico has vast deposits of iron, some of it very high grade. Near Durango there is a whole mountain of iron ore that has never been touched. Although most of the coal necessary for iron and steel production is low grade and soft, there are rich anthracite deposits in the vicinity of Monterrey, conveniently located near the country's biggest steel mill.

Since World War II the number of iron, steel and rolling mills has increased and their output has steadily forged ahead. This is partly due to the demand for structural steel for Mexico's new city growth—for hotels, airports, railroad stations and schools. The building boom has also enlarged the cement industry.

Mexican movie production has blossomed into a multimillion dollar industry, with enormous studios covering the area of many city blocks. As Latin America's largest film producer, Mexico sends her films to every corner of every country in Central and South America.

Transportation has kept pace with industrial growth. Two new railroad lines cross the sierras to the Pacific and another plunges through the deep jungles to Campeche, Tabasco and Yucatan. Over the hot desert country of the northwest, shiny rails stretch from Sonora to Lower California.

New highways web the country. The Laredo-Mexico City highway begins at the United States border. It runs straight as a ruler across the dry, flat northern country and then dips down to the hot lands of Tamaulipas to the Indian jungle village of Tamazanchale, which tourists



WIDE WORLD

### YOUR FAVORITE SONGS FOR SALE

The prices of these caged birds are fixed by their kind and the quality of their singing.



BLACK STAR

### A COMBINATION OF SUN, SEA AND SAND LURES VISITORS TO ACAPULCO

From a sleepy port town on Mexico's Pacific coast, Acapulco has grown into a world-famous resort. Its reputation has been largely built about its broad and sun-drenched beaches.

persist in calling "Thomas and Charlie." From there it climbs more than ten thousand feet, through magnificent scenery, to Mexico's central plateau and on to the capital city.

Other highways cross the plateau from east to west, from the Gulf Coast city of Vera Cruz to Mazatlan on the Pacific. In many places they pass through primitive Indian country where the folk still speak little Spanish. They climb over mountains and spiral down into deep, rich valleys.

The Pan-American Highway has been carved through to the Guatemalan border, and a branch road is pushing over the mountains and through swamps and jungle to Tabasco and the peninsula of Yucatan.

Mexico City and Guadalajara now have two of the finest airports in the world and there are fine ones in other cities. Even many of Mexico's smaller villages enjoy air service. Country people who not long ago had never seen a train or automobile now think nothing of loading their produce on a plane and flying with it to the markets in Mexico City.

After the revolution that overthrew

Diaz, the Mexican Government began to finance the building of schools and the training of teachers. Little schoolhouses appeared in remote Indian villages. Traveling teaching missions, each made up of a teacher, nurse and farm expert, toured areas where no schools could be built. Today the Government has more money than ever before with which to speed up and expand its school programs. Illiteracy is fast declining.

Recently a nation-wide campaign was organized to teach every Mexican to read and write. Some methods used in the campaign may seem strange. For instance, in Oaxaca, where the people are very musical, a prize of a complete set of band instruments was offered to the village showing the greatest increase in literacy within a given period. In one village, the Indian chieftain or cacique posted the notice: "Any person between the ages of sixteen and sixty who does not learn to read or write by the given date will be run out of town." Every government employee was required to teach at least three other persons to read and write.

Modern medicine has all but stamped out smallpox through nation-wide vacci-



BLACK STAR

#### CAMPECHE WAS OFTEN SACKED BY BUCCANEERS OF THE SPANISH MAIN

Houses with thatched roofs and cemented limestone walls are typical of this port city on the Gulf of Mexico. Some of the city's early defenses against pirates can still be seen.

nation. Great steps have been taken toward curbing malaria, yaws, pinto (a tropical skin disease), dysentery, child ailments and numerous other scourges. Many small towns have improved, non-infected water systems. New hospitals and clinics, especially for children, have been built. The big new drug industry has brought down the cost of medicines until the average person can afford them.

In the field of creative arts, Mexico has undergone a renaissance that began as early as 1921. Mexican artists developed an art that was expressive of the land. Original and powerful, it had its roots in the country's native and colonial traditions. The Government invited artists to decorate the walls of public buildings with frescoes. Such painters as Diego Rivera, Jose Clemente Orozco, David Alfaro Siqueiros and others have done magnificent murals in numerous buildings, including the National Palace, the Fine Arts Palace and the Chapingo Agricultural School.

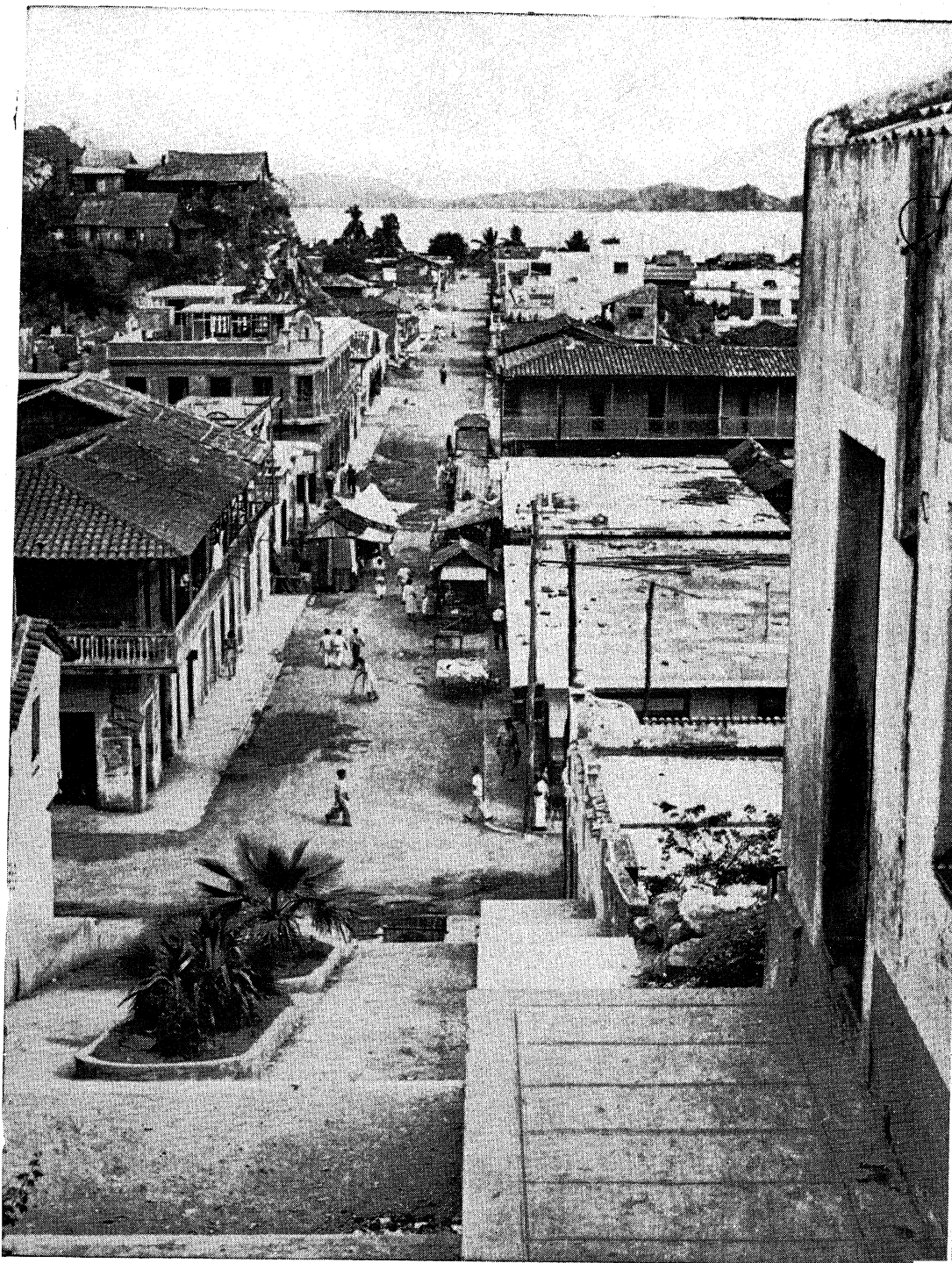
The sides and bottom of the reservoir of Mexico City's great new water system are covered with waterproof decorations. Some of the country's fine hotels have been decorated by Mexico's outstanding artists. Even public markets are elaborately ornamented with colorful frescoes.

Mexican literature has also experienced a rebirth. Manuel Azuela has depicted nearly every aspect of Mexican society in his novels, and all the stresses of the revolutionary era. J. Ruben Romero has written fine novels of village life, and such legendary revolutionary figures as Pancho Villa and Emiliano Zapata have received excellent literary treatment.

Modern progress promises much for Mexico's future prosperity and has earned the country a place among the great nations of the world. But it has not robbed the land of its unique culture and the many old ways that lend it charm and grace.

BY CARLETON BEALS

*Facts and Figures are given on page 24*

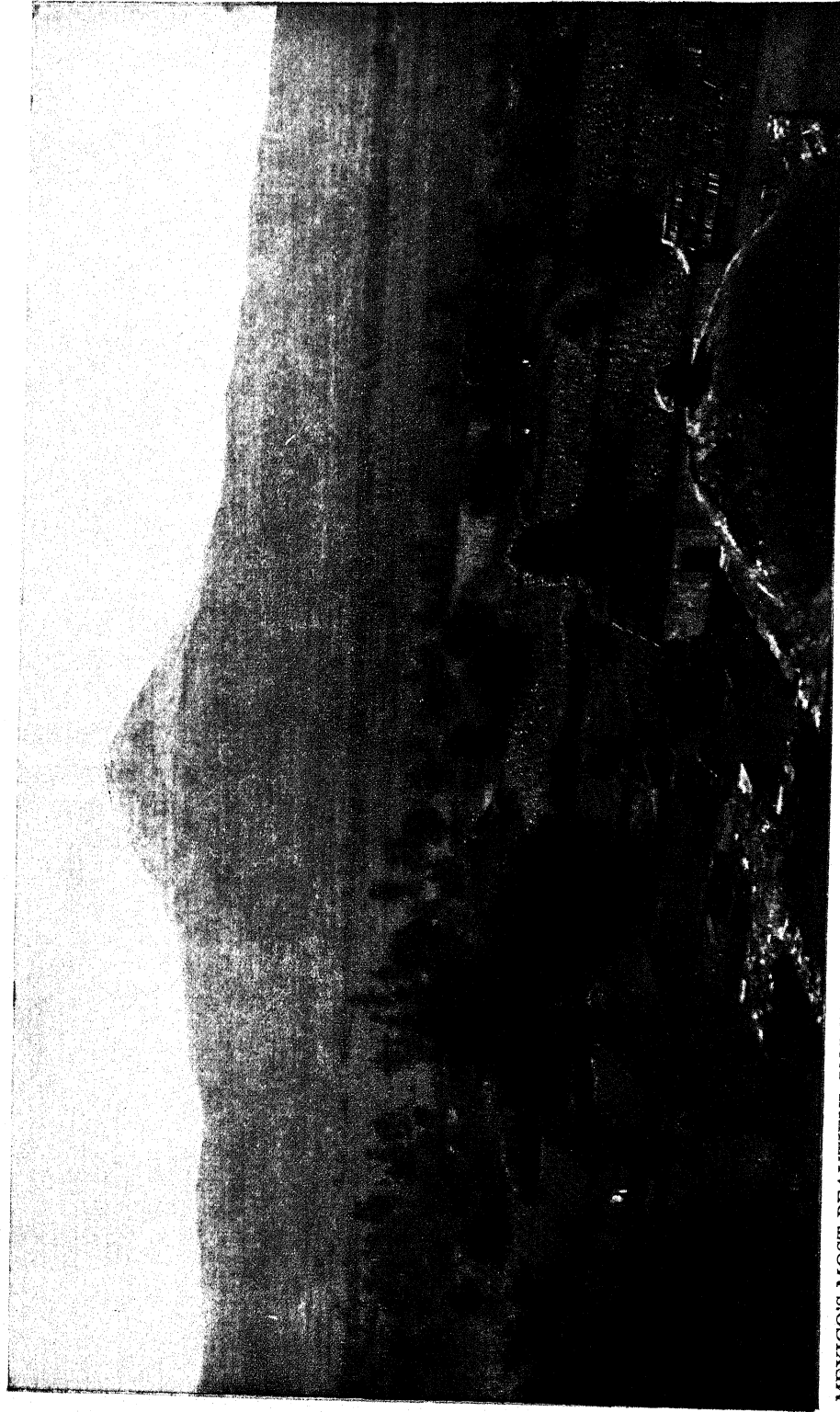


RUDOLPH BURCKHARDT

### MANZANILLO, THE MEXICAN COASTAL TOWN THAT RUNS UP HILL

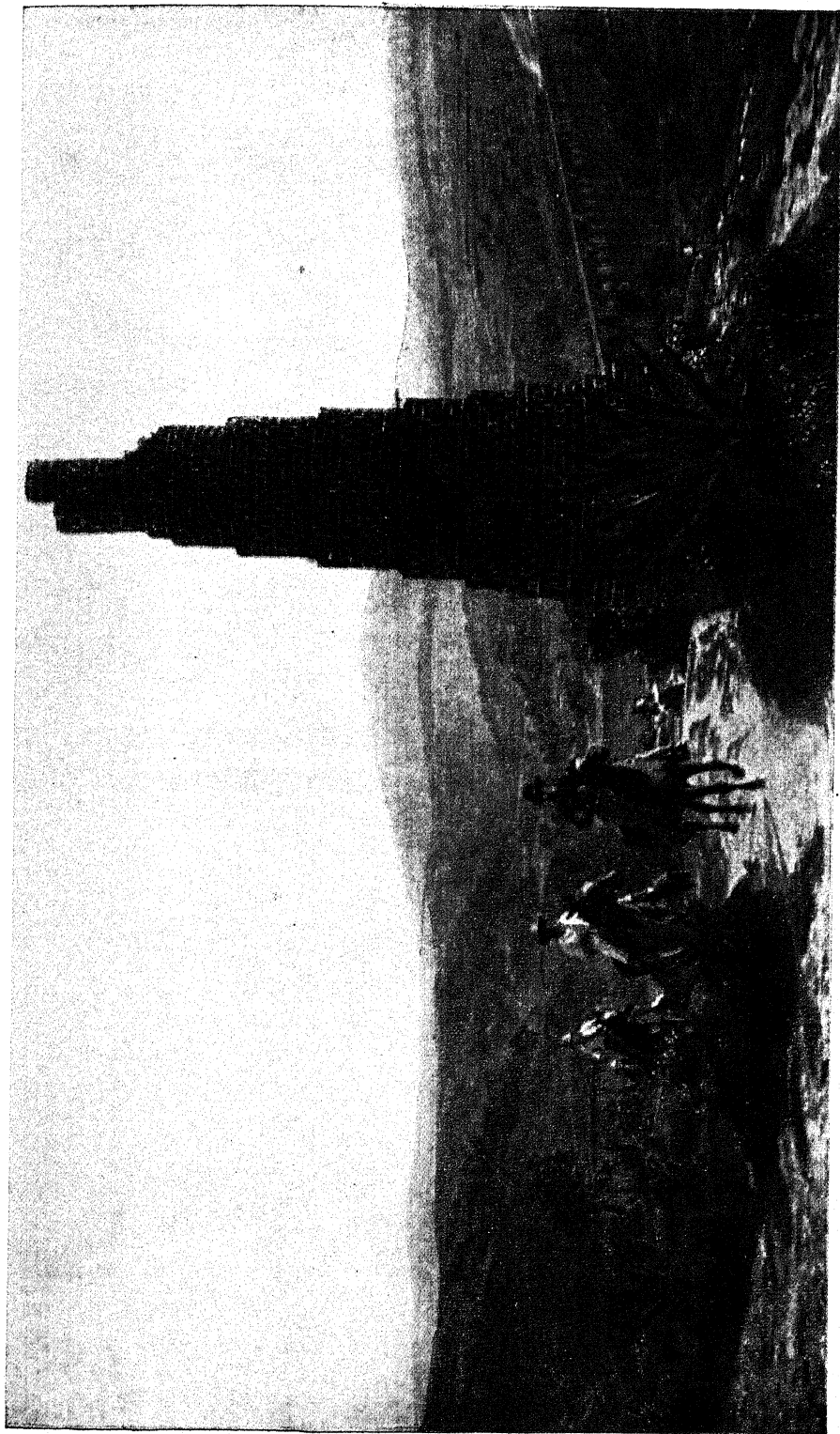
Principal Pacific coast harbor of Mexico, Manzanillo has barely enough flat surface for a square, a street and a few public buildings. Everything else has to scramble up steep hillsides.





MEXICO'S MOST BEAUTIFUL VOLCANO is Popocatepetl, dominating the great Valley of Mexico. This view across the green cornfields was taken from an old Spanish church in the village of Ozumba. About forty miles north of the volcano is Mexico City, among the lakes that

dot the lovely valley. "Popocatepetl" means "Smoking Mountain." Aztec legend says that Old Popo was a god, and the neighboring volcano of Ixtaccihuatl was "The White Woman," his wife. Snowy Popocatepetl is nearly 18,000 feet high, and Ixtaccihuatl but a little lower.



POWELL-JONES

**THIS OLD SPANISH WATER TOWER** and the aqueduct supported on high arches is the sort of structure upon which many Mexican towns depended for their water supply in colonial days. More modern systems have replaced the Spanish waterworks in Mexico's cities and in many

towns. Because much of the country is dry and mountainous, with no rain for months at a time, it is necessary to insure a steady water supply for cultivated areas. The soil is very fertile, but without water only desert plants such as cactus and spike-leaved maguay will grow.



BLACK STAR

#### ROW UPON ROW OF ADOBE BRICKS DRY IN THE SUN AT IQUALA

While still wet, the adobe blocks are shaped by hand. The bricks consist mainly of a native clay that is typical of arid regions—plastic when wet, but of a solid, stonelike quality when dry. Impossible to cultivate, such clay soil lends itself to brick-making. The bricks are left to dry in the sun for a week or more. Adobe houses are common in Mexico.

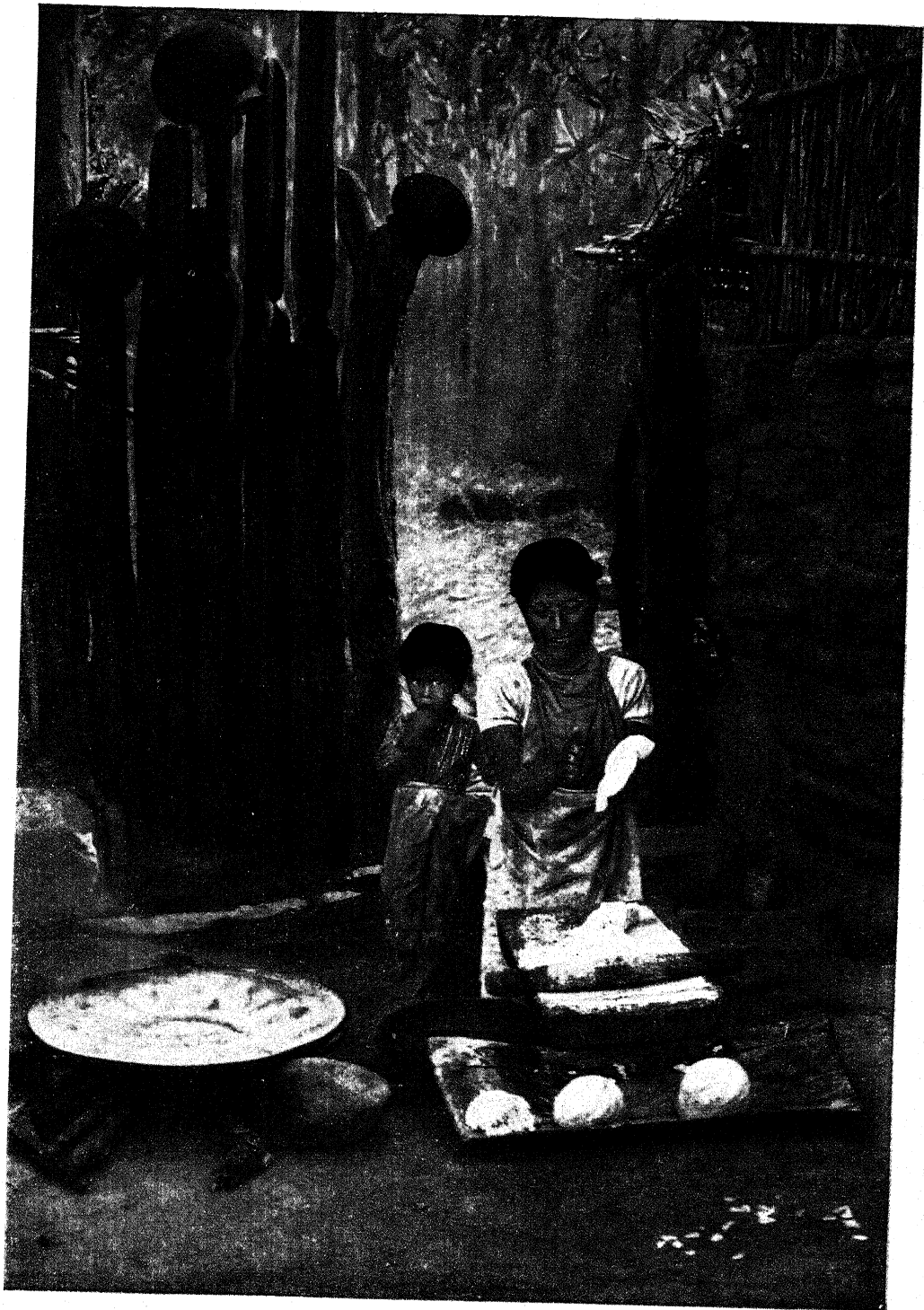


MEXICAN GOVERNMENT TOURIST DEPT.

### A STUDY IN KITCHENS

The Mexican's love of color is reflected nowhere more strongly than in his gay kitchens. The symmetrically arched stove above, with its majolica tiled surface, and the walls, covered with brightly colored earthenware utensils of every size and variety, are cheerful monuments to San Pascual Bailon, the patron saint of the culinary department.





EWING GALLOWAY

**MAKING TORTILLAS** is the perennial job of this Indian woman, and she spends hours grinding corn between the two stones in front of her. When the dough is finally ready, she skillfully shapes it with her hands into thin flat cakes, which she bakes on the griddle while Juan watches hungrily and wishes that the tortillas were already done.



**THE STREETS OF MEXICAN** towns are made colorful by the serapes of the country people. The serape, a woolen blanket with a slit in the middle for the wearer's head, is a highly useful garment as protection against sun, cold and rain. By its design, it is often possible to tell

from which district the wearer comes. The broad-brimmed sombrero, of heavy felt or plush or of simple straw, is also a distinct part of the costume of Mexico's country dwellers. Sandals of heavy leather, often of quite elaborate workmanship, are a common form of footwear.

BURTON HOLMES FROM EWING GALLOWAY

# THE PAGEANT OF MODERN MEXICO

## MEXICO: FACTS AND FIGURES

### THE COUNTRY

Bounded north by the United States, west by the Pacific Ocean, south by the Pacific, Guatemala and British Honduras, east by the Caribbean Sea and the Gulf of Mexico. Area, 760,375 square miles. Population, 25,581,250, 17% of which are white, 29% Indian and the rest mestizo.

### GOVERNMENT

By the Constitution of 1917, a federated republic (Estados Unidos Mexicanos) consisting of 29 states, a territory and a Federal District. Two former territories, occupying the Lower California peninsula, were admitted as a single state in 1951. Mexico's National Congress is made up of two branches: a Chamber of Deputies, with 147 members elected for 3 years, and a Senate consisting of 58 members elected for 6 years. The president is elected to serve a term of 6 years and is ineligible for re-election. He appoints a Cabinet to assist him.

### COMMERCE AND INDUSTRIES

Agriculture, mining and stock-raising are the principal industries. Of 275,000,000 arable acres, only about 17,000,000 are under cultivation. Insufficient rainfall makes much irrigation necessary. At the close of 1945, 65,000,000 acres had been redistributed as part of the agrarian reform program. The chief crops include maize, wheat, sugar, cotton, barley, rice, beans, sisal (about 50% of world production), garbanzos (chick peas), bananas, coffee, tomatoes, fruit, nuts, rubber, cocoa and tobacco. One of the most important forest products is chicle, which comes from Yucatan and Quintana Roo. There are 70,000,000 acres of forests containing pine, spruce, cedar, mahogany, logwood and rosewood. Livestock numbers about 33,000,000 head, mostly cattle and sheep. Mexico produced 49,140,000 fine ounces of silver in 1950, almost 37% of the world's total production. Gold, lead, zinc and copper are also mined. There are large but mostly undeveloped coal and iron resources. The amount of petroleum produced in a recent year was 74,000,000 barrels. In 1938 the gov-

ernment expropriated all foreign-owned oil properties, a \$450,000,000 investment, as a step in the "Mexicanization" of industry. Since then production has increased almost 50%. Imports: wheat, cars and trucks, flour, lards, mineral oils, textiles, iron and steel, building timber, machinery and chemicals. Exports: cotton, sugar, bananas, vegetables, coffee, sisal, petroleum, silver, gold, iron ore. Manufactures: tobacco, textiles, timber milling, metal, photographic equipment, motion-picture production, chemicals and processed food.

### COMMUNICATIONS

Mexico has 39 ocean ports. Vera Cruz and Tampico, both on the Gulf of Mexico, are the most important. There are 15,129 miles of railway and 37,314 miles of highway. The last section of the Pan-American Highway passing through Mexico was opened to traffic in 1950. Telegraph and telephone system, 113,995 miles of line. There are 1,850 radio stations, including 2 television stations. More than forty airlines serve the country and there is international service to all the Americas and Europe.

### RELIGION AND EDUCATION

Church and state separate and all religions tolerated. Catholicism well-nigh universal; priests are named by the bishops and must register with the government in order to be licensed. No ecclesiastical body can hold landed property.

Education free and compulsory, and secular in all schools. Education in the Federal District and territory is under the control of the national Government; elsewhere it is controlled by the state authorities. In a recent year there were 25,972 schools of all classes, including 440 secondary, 25,330 nursery and elementary schools and 202 colleges, universities and vocational-training schools and colleges. There is one university exclusively for women.

### CHIEF TOWNS

Populations: Mexico City, the capital, 2,113,451; Guadalajara, 337,000; Monterrey, 339,634; Puebla, 229,976; Merida, 155,890.

# THROUGH SIX REPUBLICS

## *Mixed Races and Tropical Lands of Central America*

Long before Columbus sighted the coast of Honduras in 1502, or Balboa crossed the Isthmus of Panamá at Darien, there were wonderful native civilizations in Central America. Ruined cities built by the Mayas are still hidden away in the jungles of Guatemala and Honduras. The Spaniards subjugated more or less thoroughly the various Indian groups, and impressed upon them the Catholic religion and some European civilization. The republics of Guatemala, Salvador, Honduras, Nicaragua, Costa Rica and Panamá—as well as the tiny colony of British Honduras—are all inhabited by Spanish-speaking peoples of mixed Indian, Spanish and Negro origin. The admixture of races has both retarded and advanced the development of this lush tropical region rich in natural products.

CENTRAL AMERICA, that narrow and tortuous stretch of land that forms the connecting link between the continents of North and South America, is one of the world's centres of volcanic activity. No equal space on the earth possesses so many extinct and active volcanoes. Life in a volcanic country means that one can never be quite certain that the house may not collapse suddenly, or a mountain peak burst into flame. Santa María volcano in Guatemala was always looked upon as extinct, but in 1902 it suddenly broke into violent eruption and an area of two thousand square miles was strewn with ashes and pumice stone, ruining houses and plantations and killing hundreds of people. In the same year there was an earth tremor that lasted for nearly a minute, and eight important, flourishing cities were ruined in those seconds of horror.

The volcanic ridges of Central America run from northwest to southeast, keeping close to the Pacific coast. At Panamá the mountains are lower and the narrow peninsula is twisted almost due east and west, so that Balboa was led to call the Pacific the South Sea. The low shores of the Caribbean from British Honduras to Panamá are covered with mangrove swamps and jungle; they are the "hot lands" where mosquitoes swarm and fever threatens. Here are primeval forests rich in cabinet woods and dyewoods of every description. The golden-red mahogany flowers blossom among the scarlet clusters of magnificent big ceiba trees. Down

beneath the thick branches lianas and creepers weave a dense impenetrable network of undergrowth, and ferns grow twenty feet high. Brilliant orchids with long jagged waxen petals grow in profusion; one could pick armfuls and not be able to tell where the flowers came from. Red parrots, greenish-blue trogons with tails three feet long, white egrets, toucans with bright bills, varicolored woodpeckers and jewel-like humming-birds add to the luxuriant beauty of the jungle. Alligators swarm in the rivers; there are plenty of snakes, and countless insects. In the rainy season the forest is almost impassable, and this condition prevails for several months in summer. Among the hills, from April to December, the rains take the form of a hard shower every afternoon, with fine clear weather the rest of the day.

The soil is unbelievably fertile. When cleared and properly drained to eliminate the menace of fever and make cultivation possible, it produces good sugar-cane, and bananas by the million. This important fruit is now grown in most districts within quick reach of tidewater and the fast steamers which rush the green bunches to North American markets. In Panamá and Honduras bananas are the chief crop.

As one goes inland from the Caribbean the land rises. River valleys cut through broad uneven wooded highlands three thousand feet and more above sea level. There are fine grazing-grounds for cattle and horses. As in México, patches of





**AT COPAN** in Honduras there are some remarkable ruins of ancient Maya buildings, elaborately carved with figures, symbols and mythological designs. The figure above represents some god, splendidly isolated among the remnants of that mysterious civilization which dates back to at least 613 B. C., the year the Mayas began to keep their calendar



**BEAUTIFUL LAKE ATITLAN** lies in the south of Guatemala, nearly six thousand feet above sea level, with the volcano of Atitlán brooding over it. Like many volcanic lakes, it is very deep, and there are places where one cannot find bottom with a thousand-foot line. The formation

of the country makes it liable to earthquakes as well as eruptions, yet such is human persistence and the force of habit that the Indians cultivate their cornfields not only on the border of the lake but almost at the edge of the volcano's crater, high up among the misty, white clouds.

ELLIS



HONDURAS CONSULATE

### A PLEASANT PLAZA IN TEGUCIGALPA, CAPITAL OF HONDURAS

In a mountain valley on the right bank of the Choluteca, Tegucigalpa is the industrial and commercial center of Honduras. It is serviced by Toncontin Airport and the Inter-oceanic Highway.

corn provide the staple food of the people. Cacao plantations flourish, the orange-yellow pods clustering on each tree trunk, and coffee berries show red against the glossy green foliage of the carefully tended trees. Coffee grows high up the mountainsides, thriving on the rich volcanic ash which forms much of the soil. Unless a "fire-mountain" is decidedly active, its slopes are covered with forests and farms to the very edge of the crater.

One volcano after another lifts its beautiful cone in the jagged skyline of the mountain range. If one should fly from México City to Panamá, one would find the course sprinkled with volcanic peaks. The country is so rough, mountainous and heavily wooded that railroad construction is very difficult and aeroplanes offer much the easiest means of transportation. Air service is now established throughout Central America, and is constantly being improved. It should have important effects on all the countries, bringing villages, which have been practically isolated in the mountains for centuries, close to civilization. There are towns where the only way to take anything to market is to carry it, and the Indians are trained from childhood until they are able to bear loads of two hundred pounds up and down steep trails.

The Indians are descended from different tribes which inhabited the country in ancient times. The Mayas were the most remarkable, as they had a great empire in Guatemala, Salvador and parts of Honduras and México. The jungle now grows over the massive stone ruins of their cities, and archæologists study the carved inscriptions to discover more of their fascinating history. Other tribes, such as the Mosquito Indians of the Nicaraguan coast and the San Blas Indians of Panamá, were much less civilized.

The Spaniards had conquered all these different peoples by 1524. White men came as rulers, the Indians were enslaved, and a mestizo class grew up. (Mestizos, or ladinos, are of mixed Indian and European blood.) The Catholic religion was adopted by the Indians, and the priests built many a beautiful big church. Spanish rule lasted about three hundred years, when Central America revolted along with México. For a time the territory (except for Panamá) was united, but after 1839 the different provinces separated. Panamá was part of the Republic of Colombia until 1903, when the little isthmus state became independent. All of the tiny republics have suffered from civil wars and unwise government. It is very difficult for countries peopled by

## THROUGH SIX REPUBLICS

such different races as the Indian, the Spanish and the Negro to learn in a short time how to govern themselves. For centuries they were used to obeying absolute rulers who did little or nothing to stimulate popular education. As a result the people were ignorant and the countries were backward. Today, however, all that is changing. Progress has reached even the most backward districts. Schools are abundant, natural resources are being exploited and commerce and industry are increasing each year.

Guatemala, most populous of the independent Central American states, shares with its neighbor Mexico many ruins and other reminders of Mayan civilization. The country faces the Pacific Ocean to the south and has a coastline on the Gulf of Honduras, an arm of the Caribbean. Few parts of the world have such

extreme variations in altitude or greater climatic contrasts. The hot damp atmosphere of either coast is wholly different from the delightful invigorating air of Guatemala City, the capital, five thousand feet above the sea. The former capital was called Antigua Guatemala and was the greatest, finest city in North America before an earthquake destroyed it in 1773. The shattered walls of churches, convents and palaces still suggest its ancient grandeur, though Indians live in squalor among the ruins. The present city stands some miles to the east, in a valley overshadowed by volcanoes. The beauty of the situation gives no hint of the danger which seems always to menace the capital, yet in 1917 the city was torn to pieces by another earthquake. A hundred thousand people were made homeless and scarcely a wall was left



FIGHTING MEN FROM THE MOUNTAINS OF GUATEMALA

The width and hues of the stripes indicate the village from which these Indian troops came. Skilled fighters by nature, they volunteer for training in military tactics.





THOMAS F. LEE FROM EWING GALLOWAY

**BANANAS FOR YOUR BREAKFAST** come from several thousand miles away on the eastern coast of Central America—from Costa Rica or perhaps Honduras, or from Guatemala where this stem was grown. The fruit is cut just so many days before it is ripe, and shipped in refrigerated compartments where it ripens by the time it reaches its destination.



GEORGE STONE FROM EWING GALLOWAY

**A MARKET WOMAN OF LA UNIÓN** in Salvador has set down her basket of fruit in the hope of making a sale, or else just for the sake of a little conversation. She always carries her load upon her head, for that is the Indian woman's way and most Salvadoreans have more In-

dian than Spanish blood in their veins. The tropical fruits in the basket are luscious past description, and she could sell us not only bananas, oranges and pineapples but less familiar fruits like pomegranates, guavas, star-apples and avocados, which are sometimes called alligator pears.

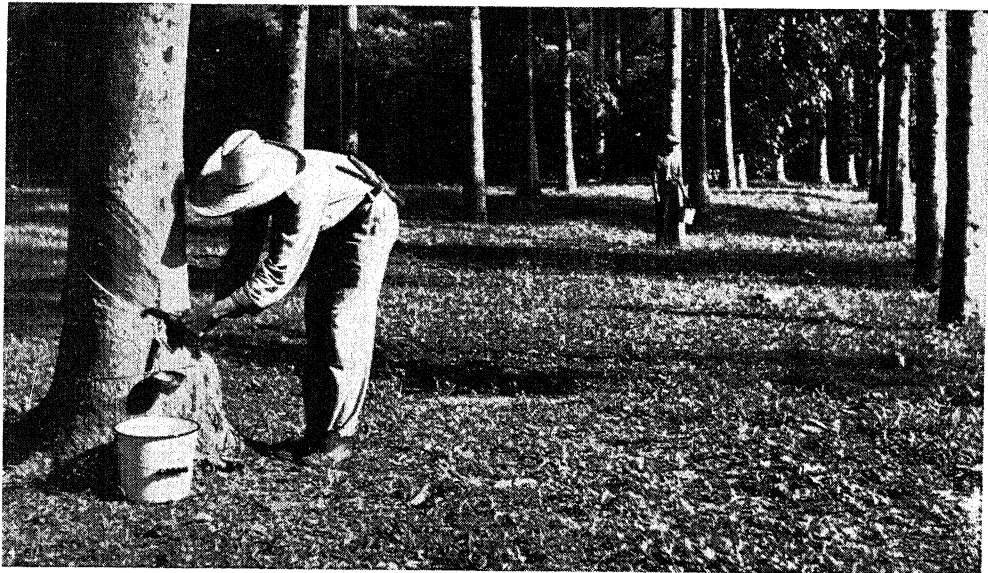
## THROUGH SIX REPUBLICS

standing. It has been rebuilt with low stone and stucco houses painted white, or pink or blue or yellow. It is a typical Spanish-American city, where new and old, civilization and barbarism are all to be found. Automobiles fill the streets, and turkey buzzards perch on the rooftops when they are not busy cleaning up refuse. If we go to the native market we shall see men and women come trotting down the road in Indian file, the men with huge loads on their backs, the women with tremendous market baskets on their heads. Many of them have been three or four days on the way. For each load they carry, they will receive four or five dollars—a good week's pay. Of one of these market women a writer said:

"She had an open-work basket, full of fowls and ducks, on her back, on which was also slung a baby; in her arms she carried a fine young pig and on her head was a tray of tortillas. As she jogged along the baby cried, the porker squealed, and the poultry made noise enough to drown her own groans."

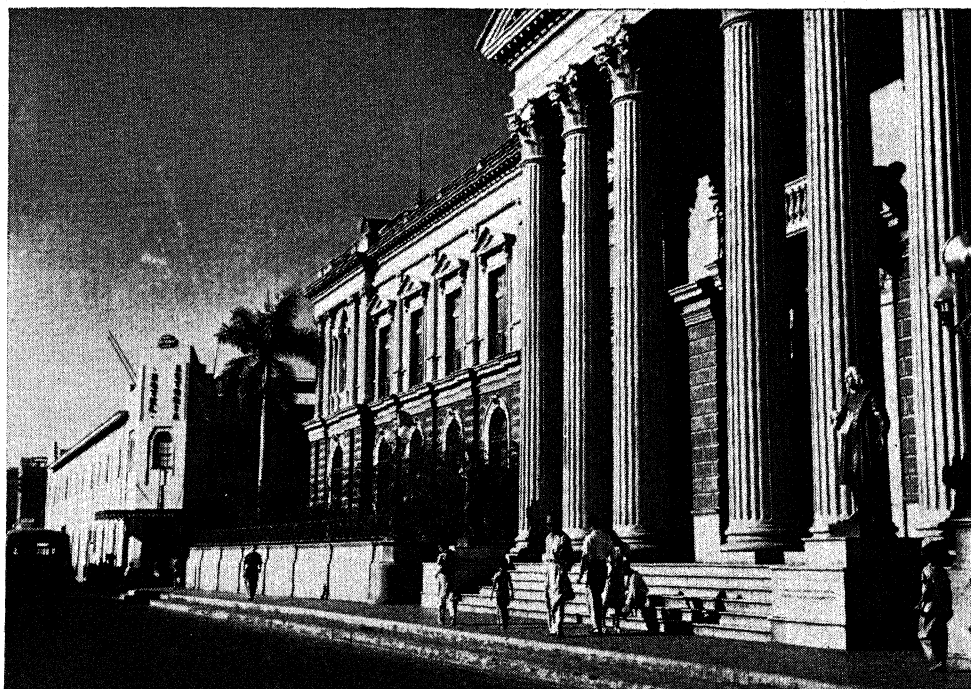
Guatemala is an Indian land, for only about 10 per cent of the inhabitants are white. The Indians live in upland villages of thatched huts and spend their days working as porters, or as cultivators on the big coffee fincas. The women make pottery and weave bright warm blankets of good quality from homespun wool. They embroider their cotton blouses in colorful patterns. Each tribe and village has its own distinctive design, so that an Indian girl's dress always indicates where she was born. The men wear white cotton suits, and in addition an apron of plaid wool. They top their costumes with a bright kerchief and a sugar-loaf straw hat. Altogether, the countryside of Guatemala is as picturesque and beautiful as one could wish.

British Honduras is a slice of land bordering the Caribbean Sea and lying between Guatemala and the Mexican peninsula of Yucatán. It possesses valuable forests of logwood and much mahogany; the first British settlers were buccaneers who came from Jamaica and began to cut



TAPPERS ON RUBBER PLANTATION AT TELA LANCETILLA, HONDURAS

While rubber once was obtained from wild rubber trees, today the trees are usually cultivated on plantations. When a tree is five to seven years old, a spiral channel is cut around it and a cup is fixed at the end of the channel to catch the flow of latex. At regular intervals, new grooves are carved to allow the old channels time to rest and renew their bark.



**STATELY COLUMNS** and royal palms contribute to the beauty of the National Palace of El Salvador. The modern capital city, San Salvador, lies among a group of volcanic mountains.

timber for a living. There are very few pure-blooded white people in the colony; most of the population have Indian, white and Negro blood in their veins. However, British influence is clearly seen in the life of the colony.

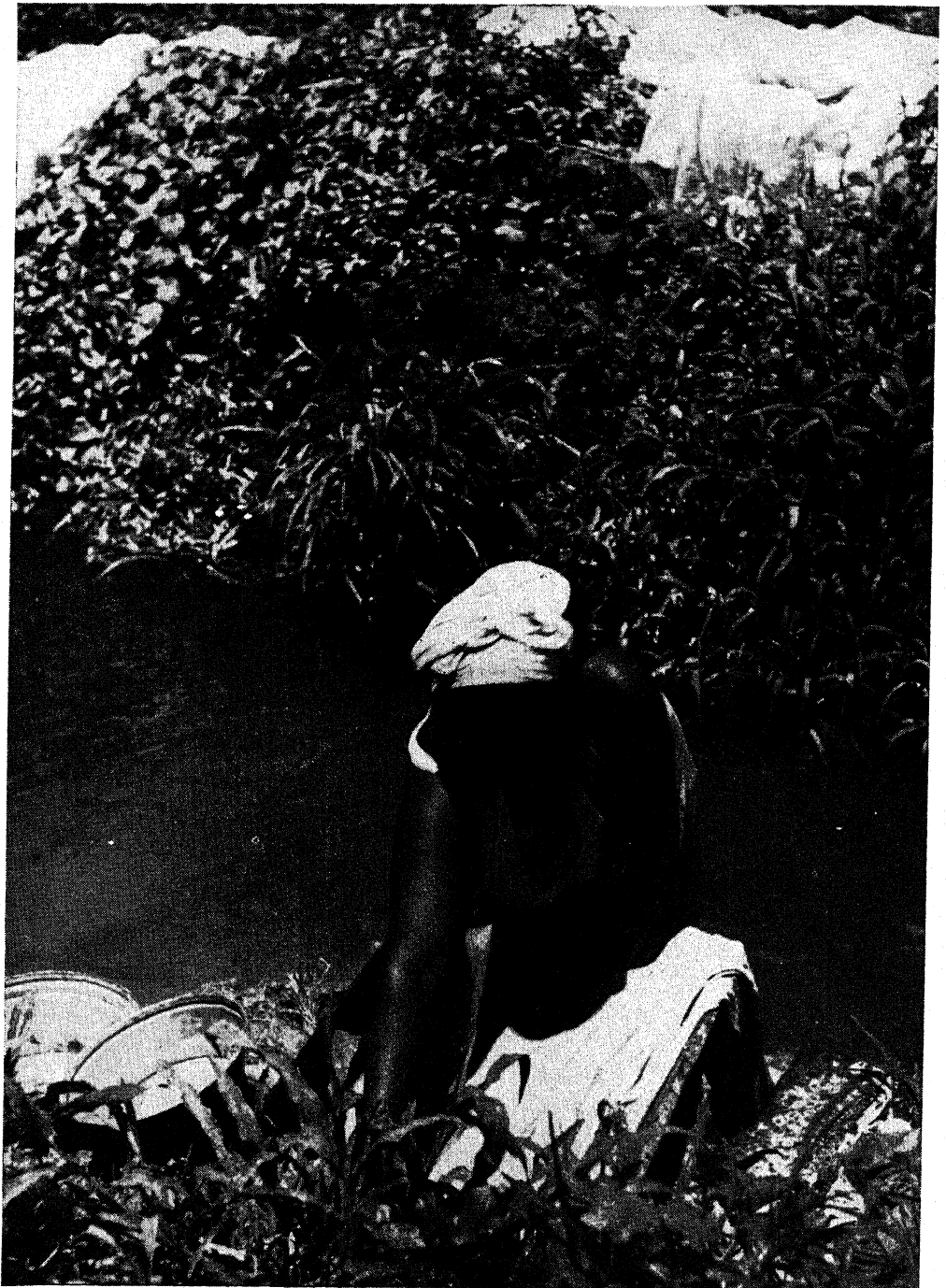
The Republic of Honduras lies immediately to the east of Guatemala, and south of British Honduras. Its Caribbean coast is almost one vast banana plantation. Many millions of stems are exported annually. Four of the country's five short railway systems were built by the fruit companies for the use of the plantations. Elsewhere goods are transported by ox-cart or muleback, though there are a few good motor roads, and aviation is highly developed. Potentially, Honduras is as rich as any land in Central America, but only the banana crop reaches anything like maximum output. Coffee, sugar, coconuts and tobacco are all being produced in increasing quantities. Stock-raising is an industry for which the country is well suited, but there are few head of cattle. Neither is mining at all well developed,

although gold and silver, iron, copper and lead exist in worth-while quantities. Honduras is an Indian land like Guatemala. Both countries have had a stormy history, with bewildering changes in government. There is great need among the people of these nations for higher standards of living.

The situation in El Salvador is a bit different. This, the smallest of the six republics, is the most thickly populated, and has one and a half times as many people as Honduras. Yet it is the only state entirely confined to the Pacific coast, and it is subject, like the others, to violent volcanic disturbances. Volcanic peaks make its skyline jagged, and the highest one, Mount Izalco, is called the "lighthouse of Salvador" because smoke and flame pour from its cone continuously.

The capital city of San Salvador has been ruined by earthquakes almost a dozen times, but after each disaster the people set to work, clear away the débris and rebuild their homes. Consequently the houses are all low, and built of wood





PHILIP GENDREAU

#### WITHOUT BENEFIT OF WASHING MACHINE

A native woman in Nicaragua does her laundry in the stream and spreads the clothes over the dense foliage to dry in the sun. Much of Nicaragua is still jungle country. The mountainous area of Sierra de los Morabios is the location of considerable volcanic activity. The area devoted to agriculture is therefore relatively small and settlement is largely in the western portion.



BLACK STAR

### A COCONUT PALM STANDS GUARD OVER LA HERRADURA, SALVADOR

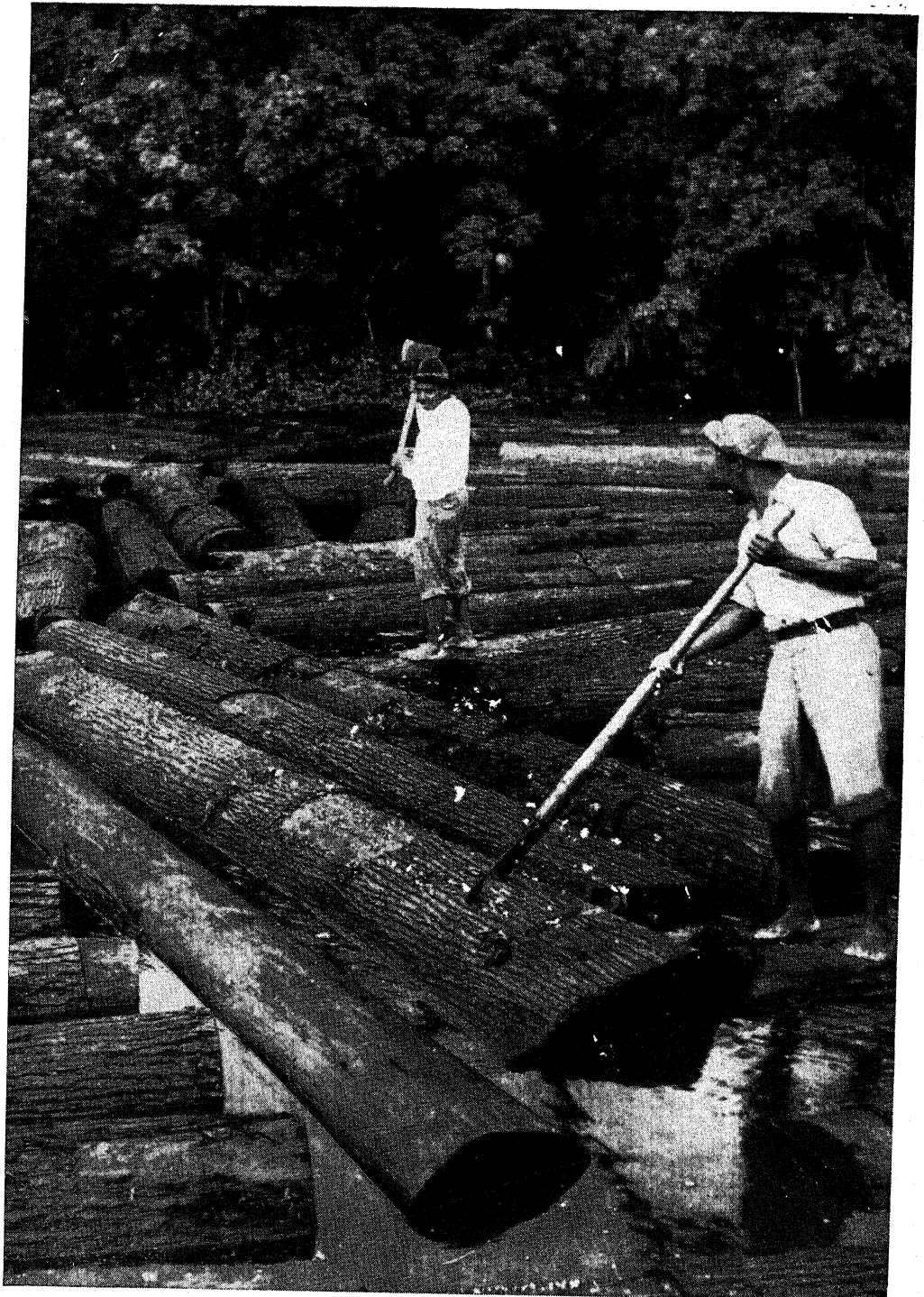
Hunting and fishing furnish livelihoods for the residents of this thatched-hut settlement on the Pacific coast. Though the huts are simple, they have fenced verandas.

or adobe brightly painted. They have red tiled roofs and patios full of beautiful flowering shrubs. The city is not only attractive, but has a cultured, cosmopolitan up-to-date life. It is situated on the lower slopes of the mountain range, with volcanoes all about.

The whole mountainous little country reflects the energetic spirit of the capital. Salvador has had its revolutions, and its finances are none too stable, but now almost every square inch of good ground is cultivated. The peasants bring produce to town in ox-carts covered with hides. Coffee is the great crop, constituting over four-fifths of the exports. Other products are sugar, cacao and cotton. The

government experiments with crops and cattle-breeding, builds roads, encourages the development of mining, and looks carefully after public health.

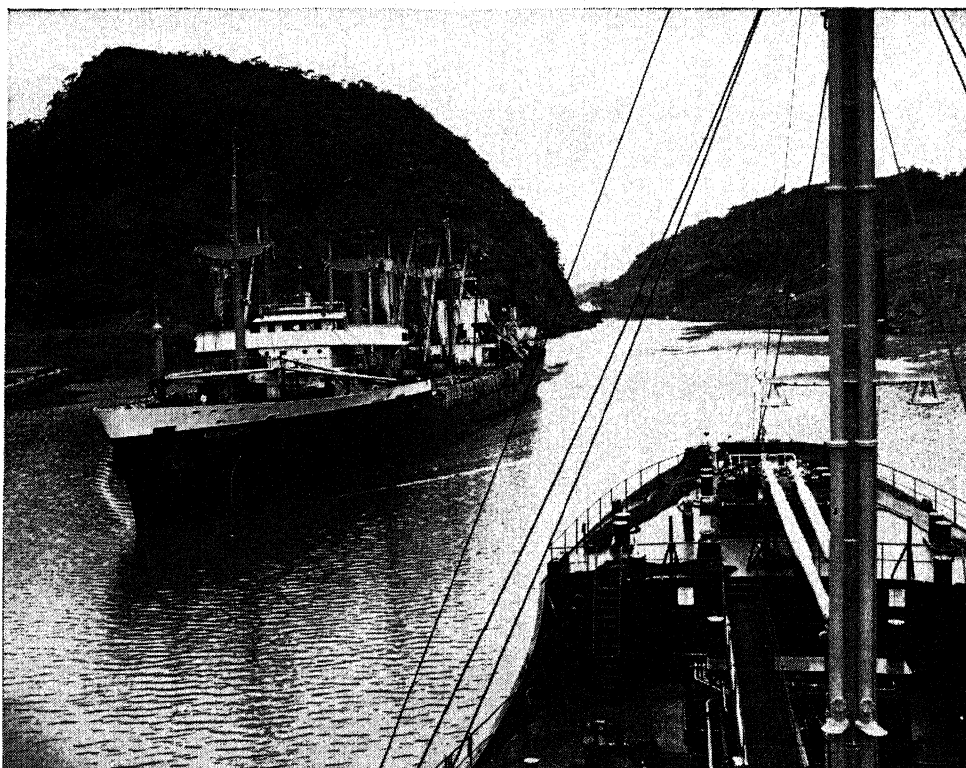
Nicaragua has had a constitution since 1939 (which was revised nine years later). It provides for legislative, executive and judicial branches of the Government, with a president elected every six years. The country has a reciprocal trade agreement with the United States, and it has been a member of the United Nations since the organization was created. The tiny tropical country is making progress in developing its resources, but half of the country is jungle land, especially along the Caribbean shore and the Honduran bor-



O.I.A.A.

### FLOATING GREAT LOGS OF MAHOGANY DOWN THE ESCONDIDO RIVER

The logs are guided downstream to the port of Bluefields on the Caribbean coast, where they are shipped to New Orleans. The hardwood is one of Nicaragua's many important export items.



STANDARD OIL CO. (N. J.)

**GAILLARD CUT**, eighty-five feet above sea level, slices through eight miles of mountains to link Gatun Lake with the Pedro Miguel locks at the Pacific end of the Panama Canal.

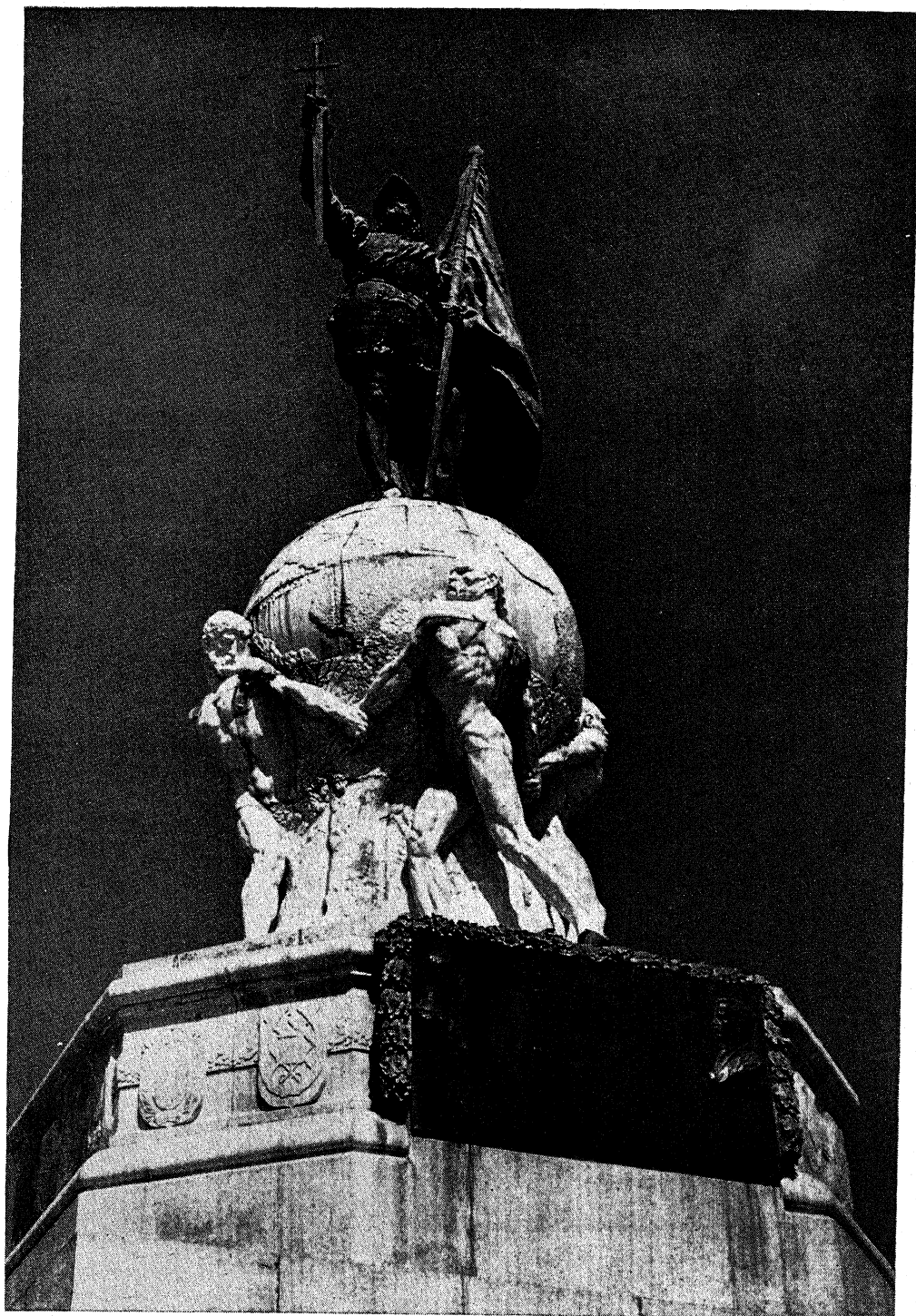
der. When the valuable timber has been cleared, the soil is ideal for banana trees, and many thousands of acres have already been planted. But most of Nicaragua's Spanish and Indian population live in the mountainous western half of the country, around beautiful Lake Nicaragua and Lake Managua. Here are the old Spanish cities, Granada and León. León used to be the capital, but Granada claimed the honor, and finally Managua was selected in order to discriminate against neither. The principal port is little Corinto on the Pacific, where palms shade the hot streets and the chief excitement is the arrival of a steamer to take on bags of coffee. Peons loll about, smoking black cigars and trying to look dignified. They are somewhat lazy and ragged, wearing dirty shirts, trousers wide at the bottom and tight at the knee, and high-crowned, broad-brimmed hats of palmetto straw. On Sunday afternoons they watch cock fights

and are willing at any time to play billiards or gamble; while whenever there is a bull fight in the neighborhood they will be there. Bull fights modeled on Spanish lines are held all over Central America.

Costa Rica, the second smallest of the Central American states, is a narrow piece of land southeast of Nicaragua. The little country is famous for coffee and bananas; it also possesses an extraordinarily rich variety of birds and reptiles, and wild hogs roam the tropical lowland forests where ferns grow twenty feet high and orchids hang from the great trees. At a greater altitude the grassy highlands called savannahs make ideal pastures and the stock farms raise hardy little horses and some fine cattle.

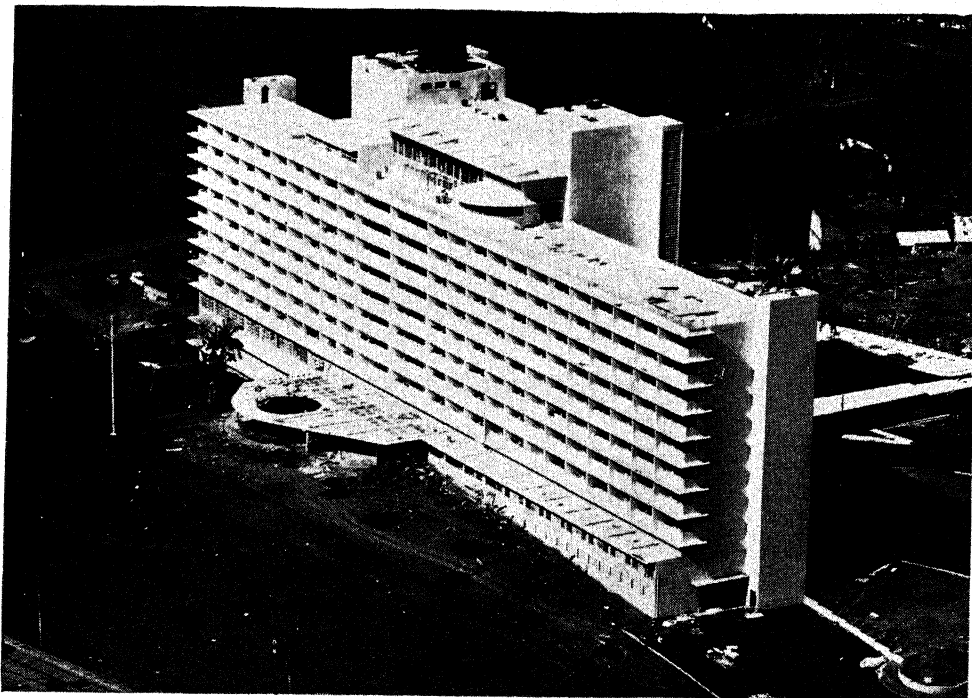
The land has suffered from eruptions and earthquakes. Irazú volcano is over eleven hundred feet high. Mount Poas has two craters—one hot and sulphurous, one full of cold green water. An earth-





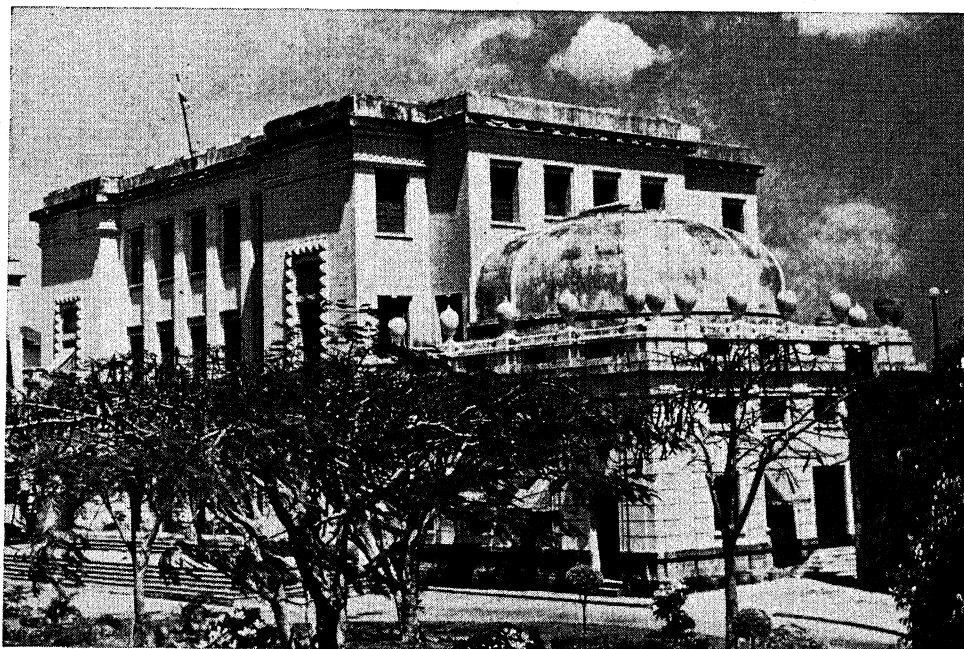
BLACK STAR

**BALBOA'S MOMENT OF GLORY.** A statue in Panama City shows the discoverer of the Pacific as he claimed the ocean and all shores washed by its waters for the Spanish Crown.



BLACK STAR

**THE HOTEL EL PANAMA**, in Panama City, was completed in 1951. It is one of the most modern and luxurious hotels in the tropics. Almost every room has a balcony.



BLACK STAR

**THE SPANISH INFLUENCE** in Panama City is shown in the structure of the Government Palace where the National Assembly and the executive departments of the Republic meet.

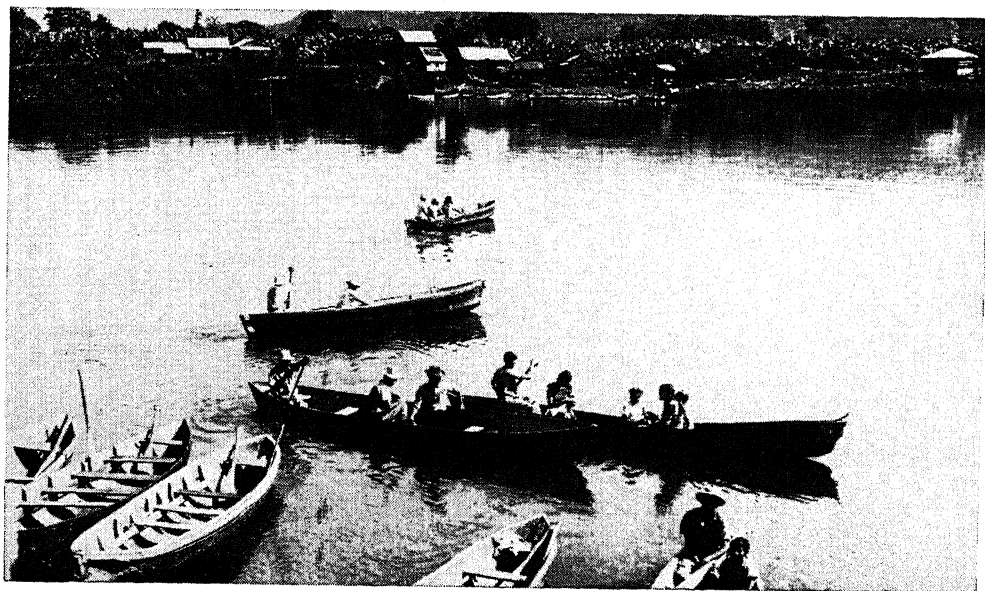
## THROUGH SIX REPUBLICS

quake following one of its eruptions ruined the beautiful old capital, Cartago, so San José is now the capital. One sees more white people on its streets than in the other Central American capitals, for Costa Rica has fewer Indians and half-breeds. The Negroes are concentrated on the banana plantations of the Atlantic coast, where other races seem unable to endure the heat. The Costa Ricans are mainly a peaceable, steady-going people, the quietest of all the Central Americans. Many of the coffee plantations are small, but the quality of the berries has a reputation. Americans own the banana plantations. Costa Rica also possesses valuable pearl fisheries, and gold and silver mines which provide an important industry. Altogether, it is a prosperous little country, and one which exemplifies the value of education.

Next to Costa Rica on the east is long, narrow Panamá, the isthmus country. At the Canal Zone, where the Rocky Mountains seem to greet the Andes, the hills are but three hundred feet high, and the distance from coast to coast is only thirty-

five miles as the crow flies. The Spaniards long ago conceived the idea of a canal here, but the dream was not fulfilled until four hundred years after Balboa sighted the Pacific. Today most people think first of the Canal when they think of Panamá, not realizing that the isthmus has been one of the world's great trade routes since even before the days when trains of pack mules carried Peruvian silver from Panamá City to Porto Bello. After the discovery of gold in California many adventurers sailed from New York to Panamá and made their way west across the isthmus, instead of going by the overland route in the United States, or sailing all the way around Cape Horn. The Panamá Railroad, first coast-to-coast line in America, was built soon after 1850 to carry these travelers quickly through the difficult jungle to Panamá City, where they took ship up the west coast.

Panamá was discovered early in the history of the New World; Columbus reached it on his fourth voyage, and a settlement soon sprang up. Then Balboa, the governor of the new colony, discov-

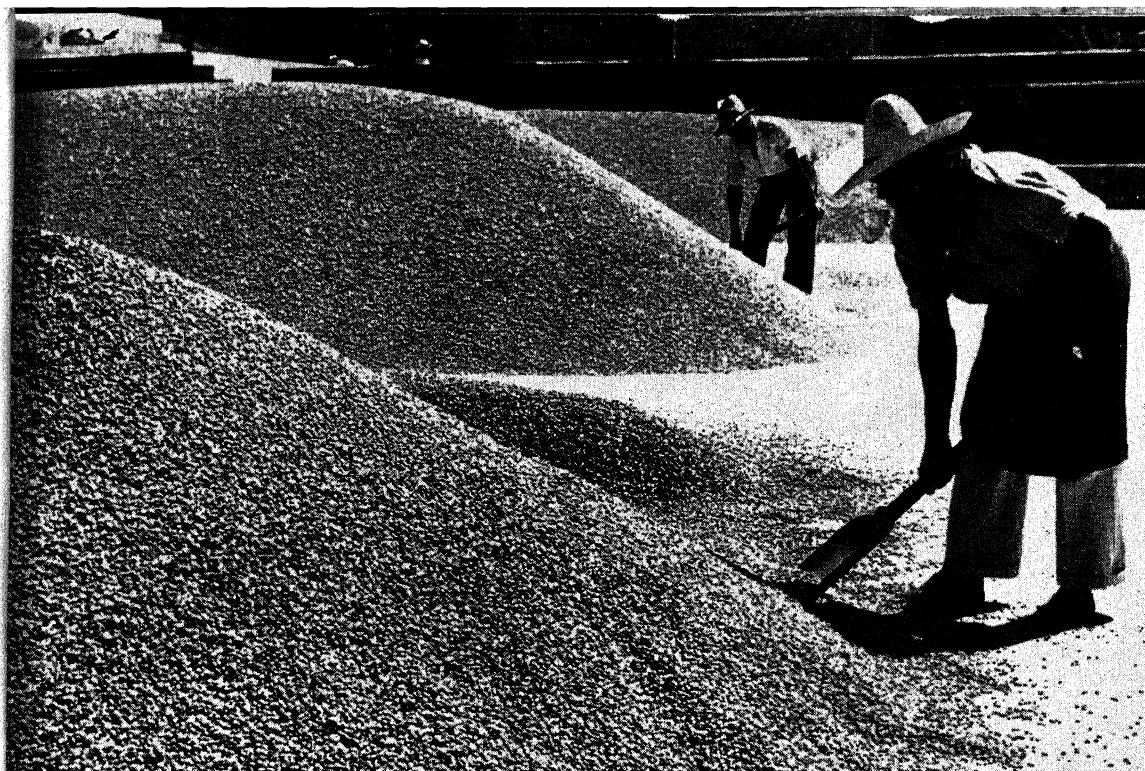


UNITED FRUIT COMPANY

### HOLIDAY TIME IN PEACEFUL COSTA RICA

Native boaters are shown at Palmar in Costa Rica. In the midst of its somewhat turbulent Central American neighbors, Costa Rica is noted for its unusually quiet, orderly way of life.





UNITED FRUIT COMPANY

#### GOOD TO THE LAST BEAN

Coffee is Costa Rica's most important crop and major source of income. It is grown chiefly in the central plateau region where the temperature, rainfall and quality of the soil are ideal.

ered the Pacific in 1513 and Panamá City became the base from which Spain explored, conquered, colonized and exploited the west coast of South America. The enormous treasure of gold, silver and jewels from the Inca lands was sent up the coast to Panamá City. There it was loaded onto mules, transported over the famous jungle trail to Porto Bello on the Caribbean, and stowed away in the holds of galleons which sailed for Spain.

The fame of the treasure ships spread far and wide, attracting swarms of pirates to the Caribbean. Sir Henry Morgan was one of the most notorious, and he organized a great expedition against Panamá in 1671. After struggling across the isthmus Morgan and his buccaneers captured, looted and burned the wealthy capital. Its ruins may be seen today, not far from Panamá City.

Without the Canal, modern Panamá would be very different. The exciting story of the great Canal has been told many times. We remember how the French began the job under the direction of the famous engineer De Lesseps, and

how the Americans took it up where the French left off. General Goethals was the man who completed the engineering work, and it was General Gorgas who paved the way for the actual construction by stamping out yellow fever. Today the Canal is a vital factor in world commerce, as well as in the life of Panamá. The water and sewage systems of the cities are run by the government of the Canal Zone, and strict sanitary regulations are enforced, to lessen the danger of disease in this hot damp climate.

The Canal has given Panamá a population as mixed as that of any place on earth. There are North Americans, both tourists and Canal employees; there are Spaniards, Germans and Englishmen, Italians, Chinese, Frenchmen, Negroes from Jamaica, Indians of various kinds, and, of course, Panamanians by birth, but even they conform to no one type.

Outside the cities, Panamá is not completely explored and developed. Jungle covers many of the low mountains and the swampy valleys. But like all of Central America, it is a tropical wonderland.

## THROUGH SIX REPUBLICS

### CENTRAL AMERICA: FACTS AND FIGURES

#### GUATEMALA (*República de Guatemala*)

Bounded north and west by Mexico, west and south by the Pacific, south and east by El Salvador, east by Honduras, the Caribbean and British Honduras. Area is 42,042 square miles; population, 2,787,030, 54% Indians and the rest of mixed Spanish and Indian blood. Is governed by a president and a National Assembly. Voting is compulsory for literate males over 18, but optional for women. Catholicism is predominant, other denominations and faiths tolerated. Has about 3,500 primary and secondary schools and a university with a total of 215,000 students. Is mainly agricultural and its principal products are coffee, sugar, maize, rice, beans, chicle, wheat, tobacco, essential oils and cabinet woods. Minor industries include forestry, mining and the raising of livestock. Has 720 miles of railway, and adequate telephone, telegraph and airline services. Its capital and largest town is Guatemala City, with a population of 293,998.

#### BRITISH HONDURAS (*Crown Colony of Great Britain*)

Bounded north by Mexico, west and south by Guatemala, east by the Caribbean. Area, 8,867 sq. mi.; population given as 66,892. Total school enrollment is 12,734. Governed as a Crown Colony with a governor, an Executive Council and a Legislative Council. Chief products: mahogany logs and timber, pine, chicle, coconuts, cedar, bananas. Capital and chief port, Belize, 22,000.

#### HONDURAS (*República de Honduras*)

Bounded north and east by the Caribbean Sea, west by Guatemala, south by El Salvador and the Pacific Ocean (Gulf of Fonseca), south and east by Nicaragua. Area, about 59,161 square miles. Present population, 1,533,625. Government includes a Congress, elected 6 years, and a president, elected directly for 6 years, and when Congress is not in session, a Permanent Commission of 5 members. Agriculture the chief industry: bananas, sugar, coconuts, coffee. Other products are rice, tobacco, hardwoods, gold, silver and Panama hats. The highway mileage is 1,400; railway mileage, 796. Capital, Tegucigalpa, 92,951. Chief ports: Amapala on the Pacific; and La Ceiba, Tela and Puerto Cortes on the Atlantic.

#### EL SALVADOR (*República de El Salvador*)

Bounded northeast by Honduras, northwest by Guatemala, south by the Pacific, east by the Gulf of Fonseca and Honduras. Area, 13,173. Population is given as 1,187,136. The Government is by a Congress, a president and 10 ministers; universal suffrage. Catholicism dominant. Education free and compulsory; 1,832 primary schools, also secondary and special schools and a National University. Of total area 60% is cultivated. Coffee the great crop, furnishing in value about 80% of all its exports. Other products: sugar, balsam, henequén, cotton, silver, gold. Capital, San Salvador, 160,380; chief ports: La Unión and La Libertad. Railway mileage, 384; highway mileage, 1,800.

#### NICARAGUA (*República de Nicaragua*)

Bounded north by Honduras, west by Pacific Ocean, south by Costa Rica, east by the Caribbean. Area is 57,143 square miles; and present population is 1,053,189. Governed by a Congress of 2 houses, president and Cabinet. Catholicism dominant. Primary education free and compulsory; 2,196 schools of all kinds and 2 universities. Chief agricultural products: coffee, rice, wheat, sesame. Chief exports: coffee, gold, sesame, rubber, mahogany, dye woods and other timber products. Other products: bananas, fruits, sugar, tobacco, cacao. Railway mileage, 287; highways being extended. Capital, Managua, 107,444. Ports: Corinto, San Juan del Sur and Puerto Somoza on the Pacific; and Bluefields, Cabo Gracias, Puerto Cabezas and San Juan del Norte on the Atlantic.

#### COSTA RICA (*República de Costa Rica*)

Bounded north by Nicaragua, west by the Pacific, southeast by Panama, east by the Caribbean. The area is 19,695 square miles, and the population exceeds 800,000. Governed by a Congress and a president; universal male suffrage for all in full enjoyment of civil rights. Catholicism the state religion but other denominations tolerated. Elementary education free and compulsory; schools, 884; enrollment, 95,813. Several higher schools and a new university. Only 8% of area cultivated, but agriculture most important. Chief crops: coffee, bananas, cocoa, maize, sugar, rice, potatoes. Exports: coffee, bananas, cocoa, logs and lumber, gold and silver. Railway mileage, 500. Chief ports: Puntarenas on the Pacific and Limón on the Caribbean. Capital, San José, 86,718.

#### PANAMA (*República de Panamá*)

Bounded north by the Caribbean, north and west by Costa Rica, south by the Pacific and Gulf of Panama, east by Colombia. Cut in two by Panama Canal Zone. Area, 28,575 square miles. Population, excluding the zone, 801,982. Government is by a president, Cabinet and a National Assembly. Catholicism dominant, but there is religious freedom. Education is free and compulsory between the ages of 7 and 15. Elementary schools, 877; enrollment, 103,932. Country also has 79 secondary and special schools and a National University. Principal occupation is agriculture; chief products are bananas, rice, pineapples, cacao and coconuts. Largest towns are Panama, capital, 122,693; Colon, 52,035.

#### THE CANAL ZONE

A strip of land ten miles wide which runs through the Republic of Panama and contains the Panama Canal connecting the Atlantic and Pacific oceans. The canal (completed in 1914) was built by the United States which leases the zone in perpetuity. The zone is nearly 52 miles long and has a total population of 52,300. Mostly American government employees and their dependents—civilians who operate the canal and soldiers who protect it. The chief towns are Balboa at its Pacific entrance and Cristobal at the Atlantic entrance.

# THE PEARL OF THE ANTILLES

## *Rich Tropical Beauty of Romantic Cuba*

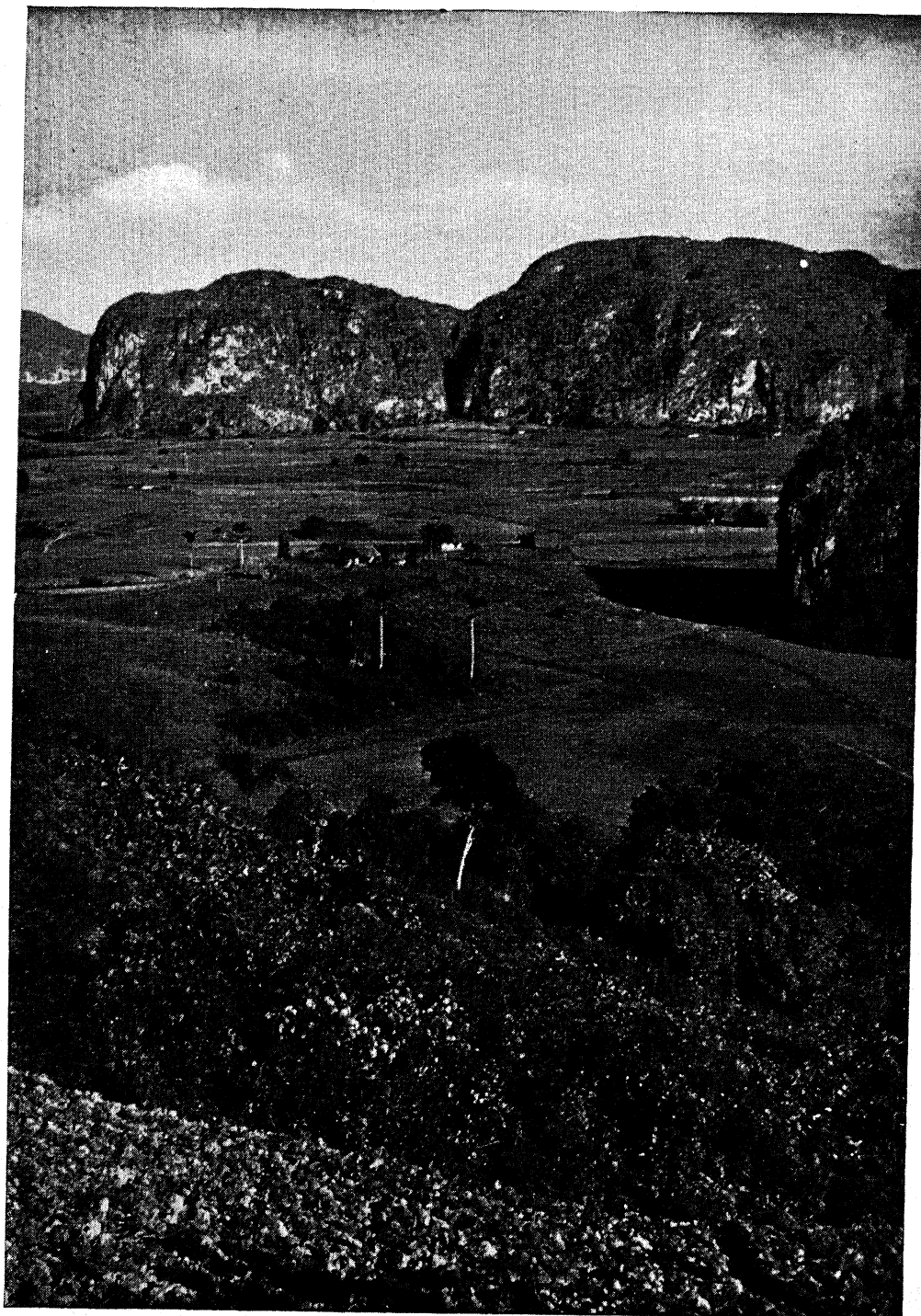
Cuba has been called "The Pearl of the Antilles," and certainly the Spaniards must have been pleased with the land Columbus discovered for them. Increasing numbers of colonists crossed the sea until Cuba was a center of Spanish civilization. From Havana every year great galleons sailed home to Spain deep laden with the treasure obtained by the slaves. The fame of this rich island, the largest of the West Indies, drew swarms of pirates of every nationality. Freed from Spain in 1898, Cuba became a republic in 1902. Most of the island's present wealth is derived from its flourishing fields of sugar-cane and great tobacco plantations.

WHEN Christopher Columbus discovered Cuba in 1492, he described it as "the most beautiful land that eyes had ever beheld." The long low coastline is bordered north and south by chains of coral islets, and indented with many superb bays and harbors. On one of these stands Havana, for centuries the foremost city of the West Indies. Inland, hills and plains are planted with acres of rustling sugar-cane and green tobacco, the rolling panorama broken by clumps or avenues of royal palms. The island has a backbone of low irregular mountains. Those in the west are of hard blue limestone and contain many beautiful caverns where in the early days the Indians took refuge from their Spanish conquerors. In some places rivers disappear into the ground and flow through hidden channels, to reappear at distant spots. To the east, where the narrow island widens out, primeval jungle growth covers the slopes and ravines of higher mountain ranges. Here orchids and lianas hang from mahogany, rosewood and cedar trees. The fertility of the soil is amazing; pineapples produce three and four crops a year, and a planting of sugar-cane can be cut for five years. In all the world there is, perhaps, no other country more favorably endowed by nature. Copper and iron are plentiful, there are asphalt and manganese deposits, and every tropical and semi-tropical plant known to man will grow.

Cuba was first settled by the Spaniards in 1511, and soon became a centre of colonial authority, a base for exploring

expeditions to México, Yucatán and Florida. Copper mines, fertile soil, and slave labor imported from Africa made it one of the richest Spanish colonies. Its position on the edge of the Caribbean was commercially advantageous, though exposing it to constant danger from pirates—French, English and Dutch. It prospered in spite of colonial restrictions on commerce, until eventually foreign trade was legalized. During the nineteenth century, when all the other Latin American countries had won independence, Cuba became increasingly discontented. Heavy taxes and oppressive government finally led to serious trouble, and one bloody and destructive war lasted ten years (1868-78). Slavery was abolished after that, but the government of the island continued to be unsatisfactory, and revolt broke out again in 1895.

In the United States people were sympathetic with the Cuban cause, and when the American battleship *Maine* was blown up in Havana harbor—supposedly by the Spaniards—the result was war between the United States and Spain. In this war Cuba was finally lost to Spain, but did not immediately receive independence. From 1899 to 1902 the United States conducted the administration, which supervised the building of roads, schools and drainage systems. Sanitation was introduced into the cities and the island was completely cleared of its ancient scourge of yellow fever. Then the American flag was lowered from Morro Castle, which commands Havana harbor, and the single-starred banner of the



CUBAN TOURIST COMMISSION

**A RICH, TROPICAL VALLEY IN CUBA'S WESTERNMOST PROVINCE**

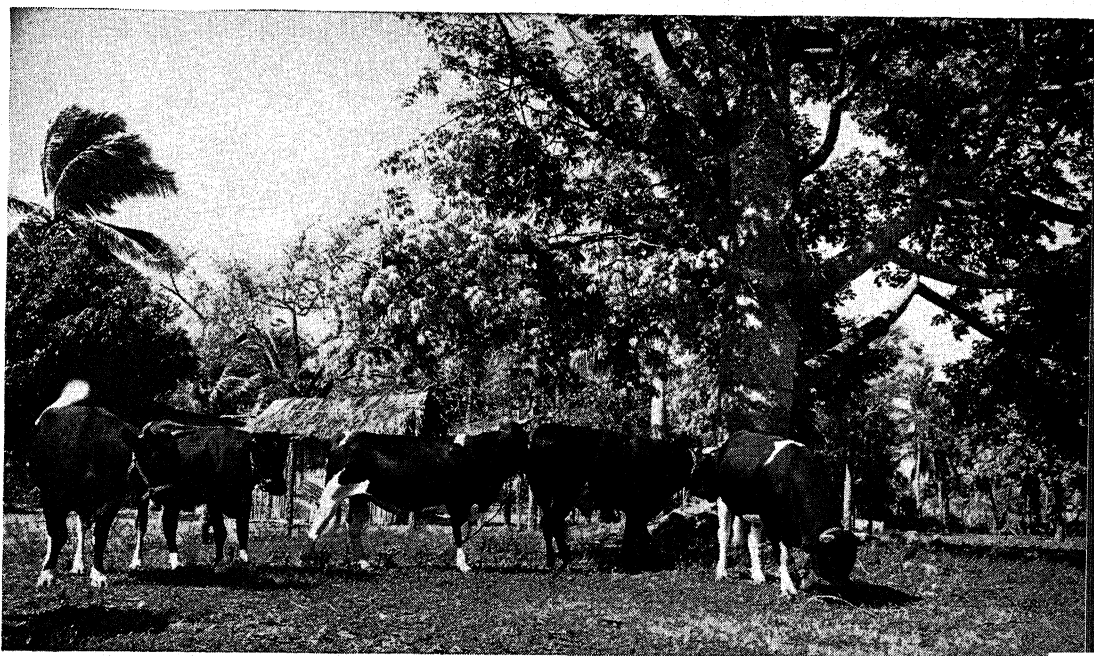
Pinar del Rio Province is noted for its exceptionally beautiful scenery as well as for its productiveness. Here Cuba's finest tobacco is grown, as are sugar cane, coffee and fruits.



BLACK STAR

#### HUMBLE HOMES AND THE ROYAL PALMS THAT MADE THEM POSSIBLE

The walls of these houses near Esperanza in central Cuba are made from sheaths of the palm and the roofs are thatched with the long, heavy leaves. Every part of a palm tree is useful.



UNITED FRUIT COMPANY

#### SLEEK DAIRY CATTLE ON A THRIVING FARM IN CUBA

Dairying has become an important agricultural pursuit on the island in recent years. There are good pasture lands and, in the warm climate, the animals can feed on them all year round.





BLACK STAR

#### BOXING AND SEALING CIGARS IN A FACTORY IN HAVANA

Tobacco is the second most important agricultural crop, after sugar cane, in Cuba. Pure Havana is the highest grade tobacco in the world, and is raised both for home and for foreign markets.

Cuban Republic rose in its stead. Cuba's lack of training in self-government resulted in some disturbances during the early years of the Republic. The United States exercised supervision over the new country and maintained the right to interfere in case of disorder until 1936. In 1940, Cuba adopted its new constitution patterned largely on that of the United States. It guarantees individual liberties and secret universal suffrage, and prohibits discrimination on the grounds of race, religion or sex.

When the Spaniards came to Cuba they found it populated by a race of tall, copper-colored folk who fled at the sight of white men. These people lived in caves or villages and grew cassava and maize. They used tools of stone and dishes of earthenware, while their ornaments were made of shell and polished stone. Although they were gentle and harmless, not in the least like the savage Caribs who inhabited some of the other West Indian islands, the Spaniards en-

slaved and destroyed them so that few traces of them remain. In eastern Cuba are families with Indian features, but the ordinary islanders of today show small sign of Indian blood. They are a result of the intermingling of the Spanish and Negro races. In a street of a Cuban city, one sees faces of every color from white through tan and brown to chocolate and black. French settlers began coming from Santo Domingo when the Negroes of that island revolted in 1791, and this immigration added still another element to the racial mixture. The white population outnumbers the colored in most sections, which is not usually the case in the West Indies. The average Cuban is intelligent, good-tempered and pleasant, and always able to enjoy life. Severe poverty is rare, although many of the less ambitious are content to live in poor conditions. The great planters maintain homes of luxury, both in the country and in Havana's fine residential districts. Most of the sugar-cane and tobacco prop-

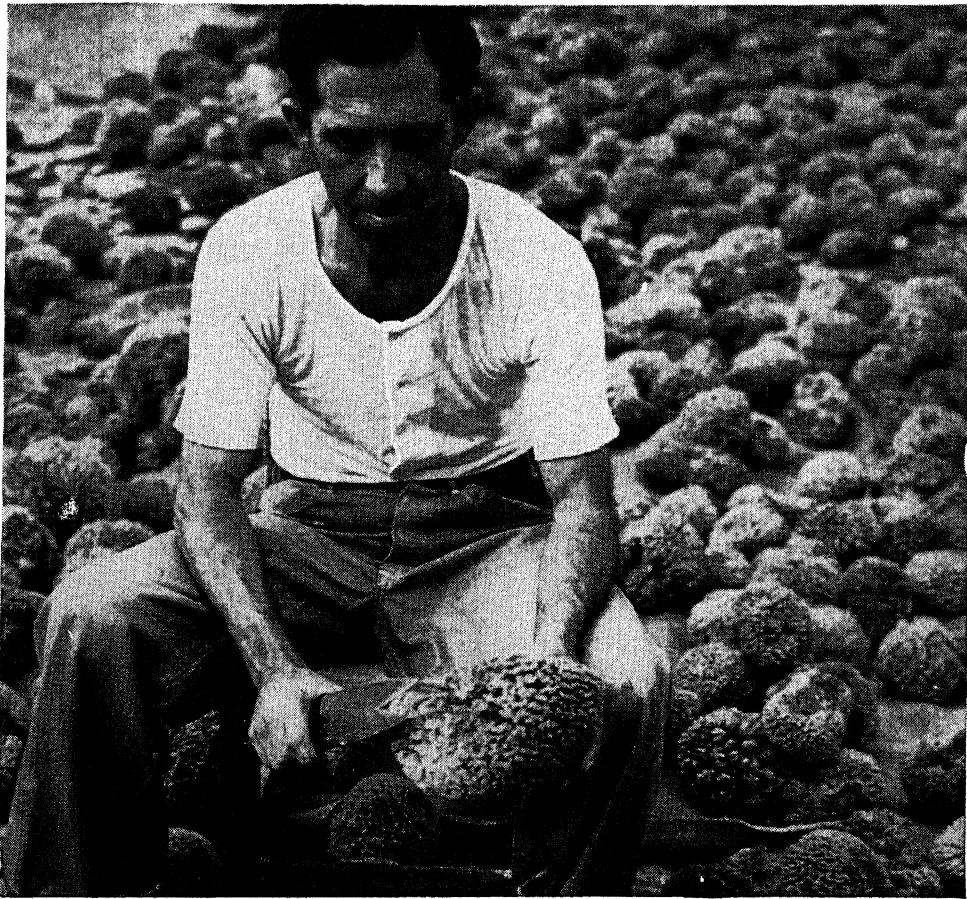
## THE PEARL OF THE ANTILLES

erties are in the hands of foreigners, who own two-thirds of the gigantic sugar business.

The sugar crop is Cuba's great source of wealth. It amounts to more than two million tons yearly, and is capable of expansion. Various as are the island's resources, its welfare is inseparable from this one industry. Sugar-cane is grown from one end of the island to the other. Only in the choice tobacco district is one long out of sight of the interminable fields of pale green stocks. During and after World War I, when Cuba was the all-important source of sugar, speculation almost ruined the industry. It was re-

habilitated by American finance, and now once more the natural advantages of soil, climate and cheap labor are giving Cuban sugar its prominent place in world markets. It can be a disadvantage, however, for the prosperity of any country to be so dependent on one crop.

Cuban tobacco is the best in the world. The finest comes from Pinar del Río, in western Cuba. Here the soil and climate are unusually good for tobacco-raising, and the land sells at an extremely high price. A vega, or farm, of twenty acres thus represents a valuable investment, and often planters are unwilling to give up any of their choice land for



BLACK STAR

### TRIMMING SPONGES TAKEN FROM THE GULF OF BATABANO

Before sponges come to market, they are dried, trimmed and sorted by size and type. Sponges are the fibrous skeletons of marine animals which are abundant in shallow waters off Cuba.



**WORKERS** on a henequen plantation near Cardenas, cut the stalks from the plants. Henequen and sisal, two similar plants, furnish the raw material for strong rope or hemp.



PHOTOS, EWING GALLOWAY

**CUT SISAL**, a durable white fiber, is placed in long rows to be dried by the sun. Sisal and henequen are two of the most important commodities exported from the island of Cuba.

## THE PEARL OF THE ANTILLES

railroads or similar public works. Modern methods, such as growing tobacco under cheesecloth, are proving profitable.

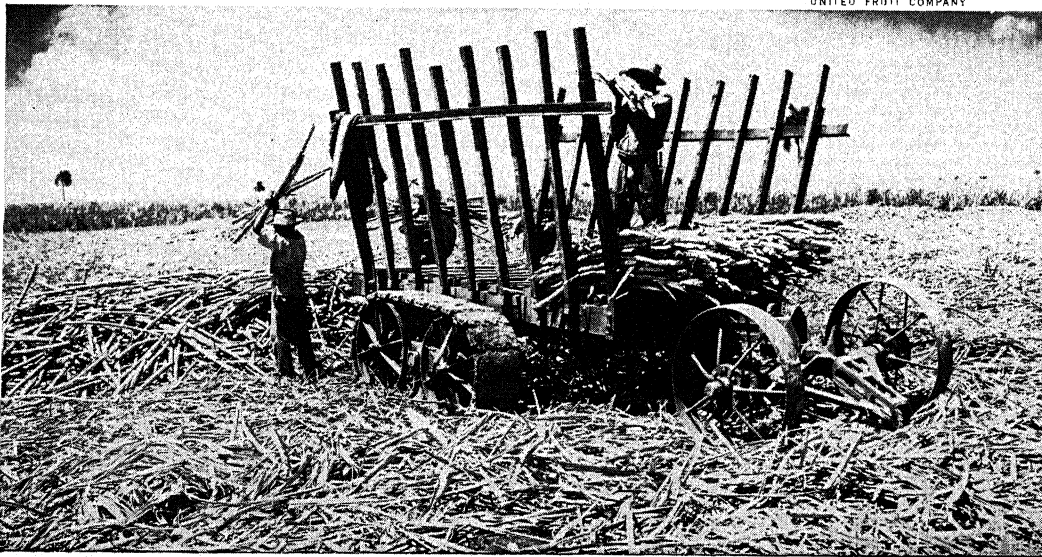
Cuba's agricultural possibilities are far from being fully developed. Climate and fertile soil give the island that luxuriance of growth so typical of the tropics. A little care and work are quickly and abundantly repaid. Then, too, Cuba occupies a fortunate position in relation to North American markets, an advantage greatly increased by the presence of many excellent harbors. Of these, Havana is the best known and the most important, but Santiago on the southern coast has an equally good port. Guantánamo, to the east of Santiago, is leased to the United States as a naval station. Across from Santiago and Guantánamo, on the north-eastern shore of the island, lies Nipe Bay, as interesting in the light of its future as of its past. This magnificent harbor was of old a pirates' rendezvous, then a smugglers' base and a fishermen's haven; now it is a growing port, the focus of eastern Cuba's agricultural development. Throughout the surrounding country

truck farms and fruit plantations flourish, sending produce to New York as early as November. Coffee and cacao plantations center here and one of the most important sugar mills in Cuba is situated near Antilla, on Nipe Bay. The hills of this eastern province of Oriente used to yield copper in large quantities, and one range is consequently named Sierra de Cobre. Nowadays these mines are no longer worked, but iron ore is dug from open-pit mines easily and cheaply, and many thousand tons are annually exported to the United States.

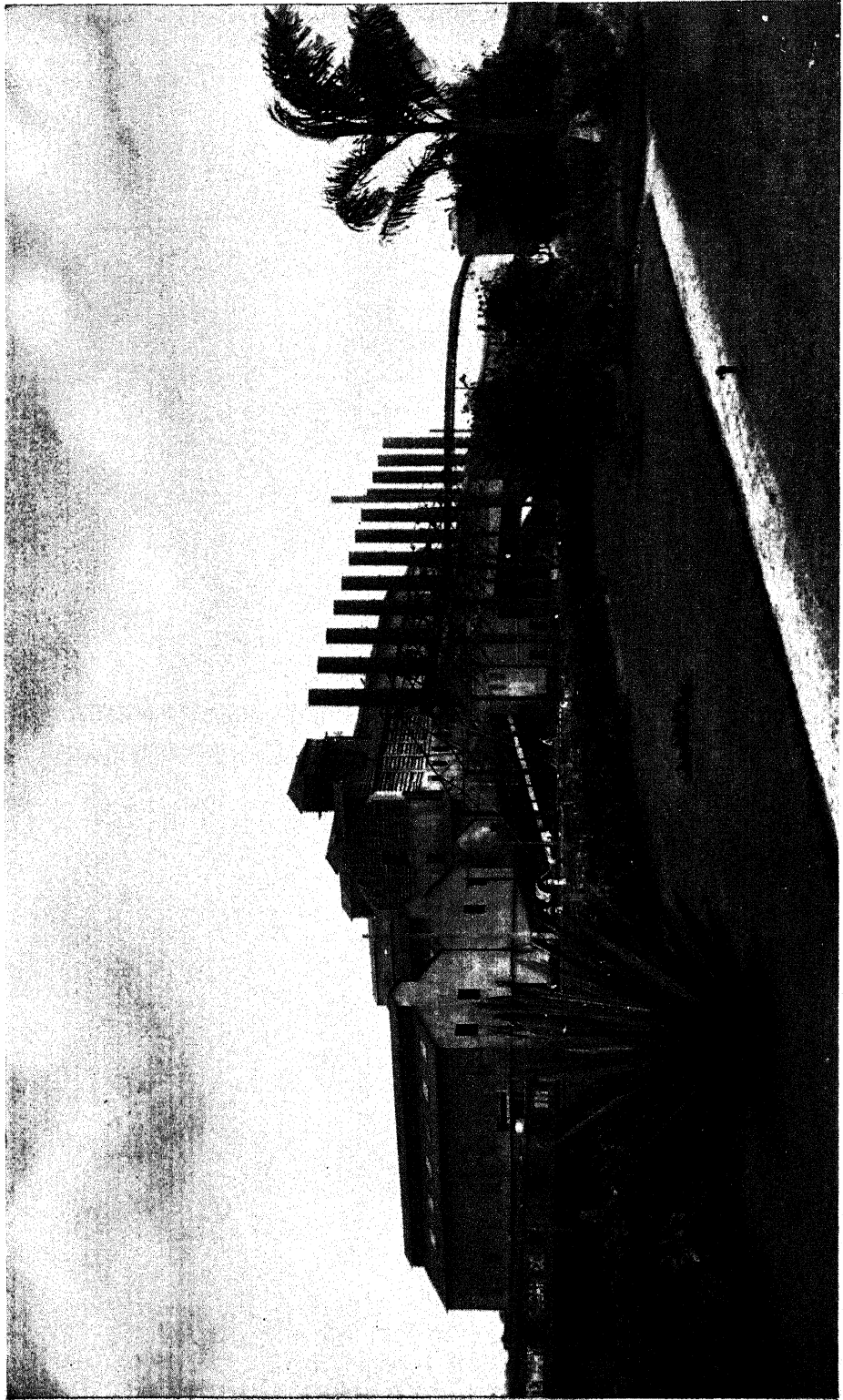
Oriente Province, with its capital, Santiago, has played its full part in Cuban history. Diego Velásquez, the conqueror of Cuba, built Santiago in 1514 and it was for years the capital of the whole island. Situated on the hills above its beautiful harbor, it appears impregnable, for the entrance to the bay is through a narrow channel guarded by fortified cliffs. But in colonial days it was twice plundered by French and by British pirates, while the combined land and sea attack of Americans and Cubans in the

### LOADING SUGAR CANE IN THE FIELD

In good years Cuba raises more than 6,000,000 short tons of sugar and considerable blackstrap molasses. In the cutting season thousands of workers pour into the fields and their knives are busy for months, cutting and trimming cane. The juicy stalks are packed into light trucks with high sides, like hayracks, and hauled to the railroad, thence to the refinery.



UNITED FRUIT COMPANY

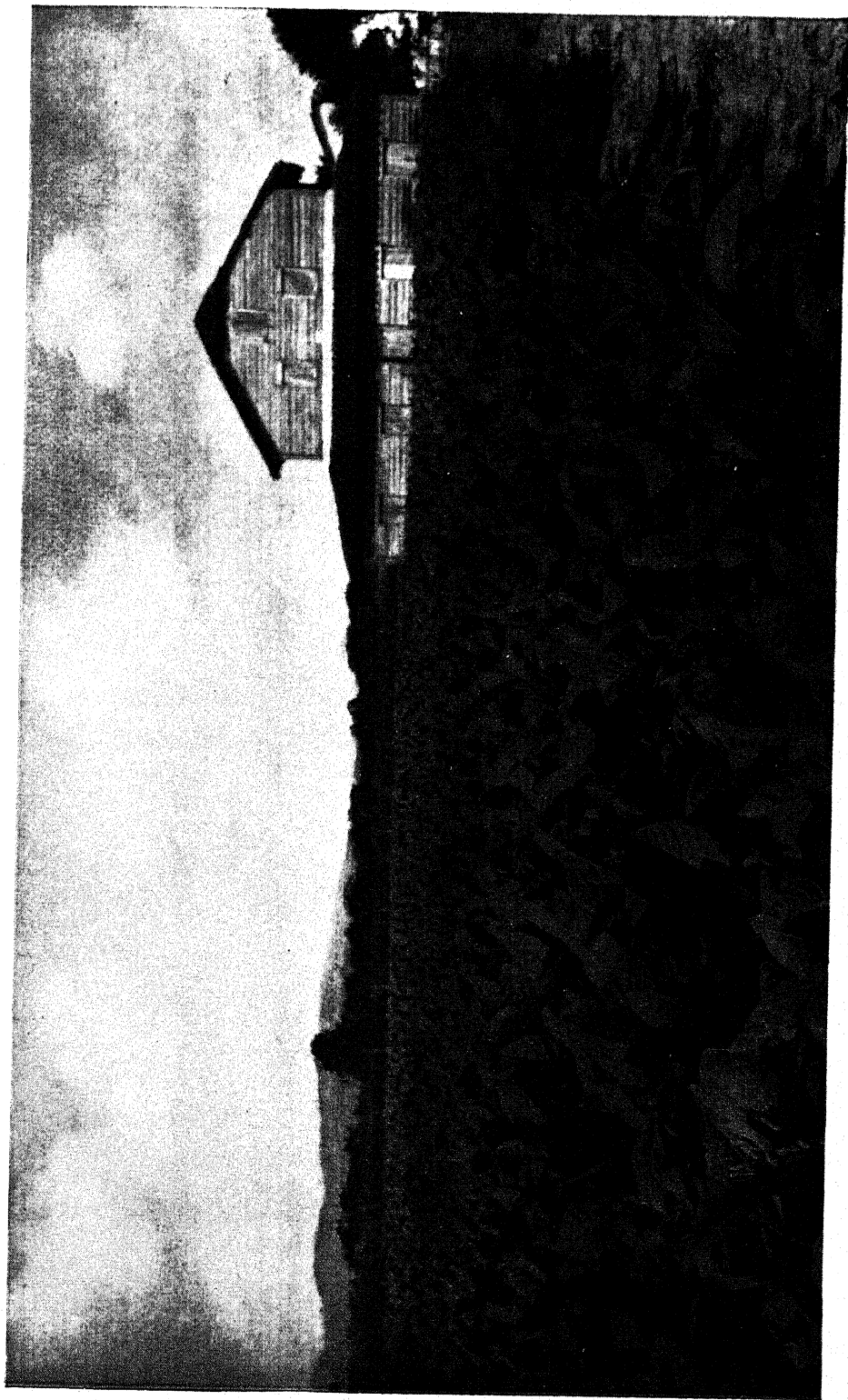


AMERICAN PHOTO STUDIOS, HAVANA

**A BIG SUGAR MILL** is fed by cane from many broad acres. Private railways criss-cross the large sugar plantations in all directions, converging at the central, or mill, where the cane is ground. The product of Cuban mills is raw sugar—coarse brown crystals which refineries trans-

form into the familiar fine white sugar we use daily. The island of Cuba ranks very high among the world's great sugar-producing countries and is generally among the first two or three. The bulk of its sugar crop is exported to the United States each year.

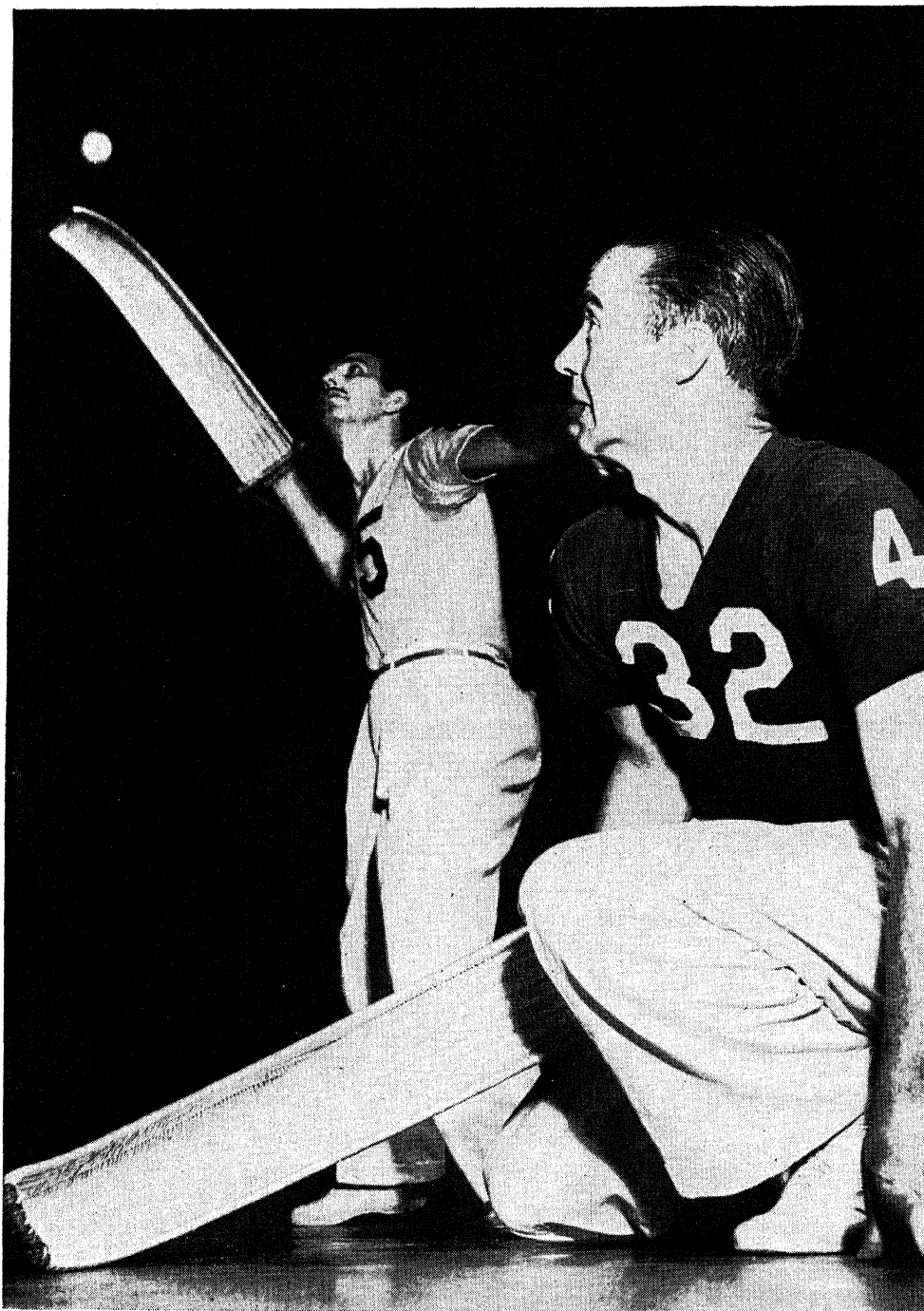




AMERICAN PHOTO STUDIOS HAVANA

**SOIL BRINGS** a very high price per acre in the Vuelta Abajo region of western Cuba, for there are the best tobacco lands on the island. It is the top soil which is so valuable, and growers have been known to sell right-of-way to a new railroad only on condition that they first be

allowed to remove the top layer of earth. Perfect climate and perfect soil combined make it possible to grow the finest Cuban cigar tobacco. The green leaves are picked at just the right stage of development and taken to the drying house, where they are kept until rich brown in color.



PINNEY FROM MONKMEYER

#### PLAY BALL—SPANISH STYLE!

Jai alai, or pelota, is the Spanish ball game, popular in Latin America as well as in Spain. The players, in teams of two, three or four, wear wicker baskets strapped to their hands with which they catch the ball (about the size of a tennis ball) and propel it against the wall of the court. The object is to keep the ball in motion, a feat requiring great speed and co-ordination.

## THE PEARL OF THE ANTILLES

Spanish-American War overcame the city a third time. To-day the old forts and batteries are crumbling, and merely render the spot more picturesque.

Leaving the cities, mines, plantations and forests of Oriente, one comes to a very different section. Camagüey, the next province to the west, is cattle country, affording pasture for the greater part of the five million head of cattle on the island. The fascinating old city of Camagüey is the one large inland city in Cuba. Its first settlers left the northern coast in an attempt to escape from pirate raids. Pirates were the bane of Cuba's colonial existence; they used its well-protected harbors and took refuge on its tiny islands. Of all the Caribbean buccaneers, Sir Henry Morgan was the one most feared in Spanish colonies of the seventeenth century. Secretly countenanced by the British government, he terrorized and sacked Porto Bello, Panama and Maracaibo, besides descending periodically upon the coast of Cuba. In 1668 Morgan raided Camagüey, killed some of its people and shut the rest up to starve in churches, while his men feasted on the town's provisions and collected everything of value.

### *Colorful Cities of Old Cuba*

It is said that the crooked streets of Camagüey were purposely built with many twists and puzzling turns in order to baffle pirates. Be that as it may, the town is a maze of irregular cobbled thoroughfares, with narrow uneven sidewalks under jutting windows, through which we may see a patio, or courtyard, with fountain, luxuriant shrubs and huge water jar. There is plenty of life and bustle indoors and out. Cattle-men and cow-ponies are a common sight in the streets, making their way past slow-moving ox-carts with huge high wheels. Peddlers in carts compete with peddlers on donkeys; one may buy milk from a wagon or from cans slung in panniers. House-to-house selling is the universal Cuban method of marketing foodstuffs. Here and there the little street opens out into a plaza, and church towers rise above

the flat bright roofs. The Church of La Merced is three hundred years old, and served as one of Henry Morgan's temporary prisons in 1668. The old-world atmosphere of the whole place is pronounced, more so than in any other large Cuban city.

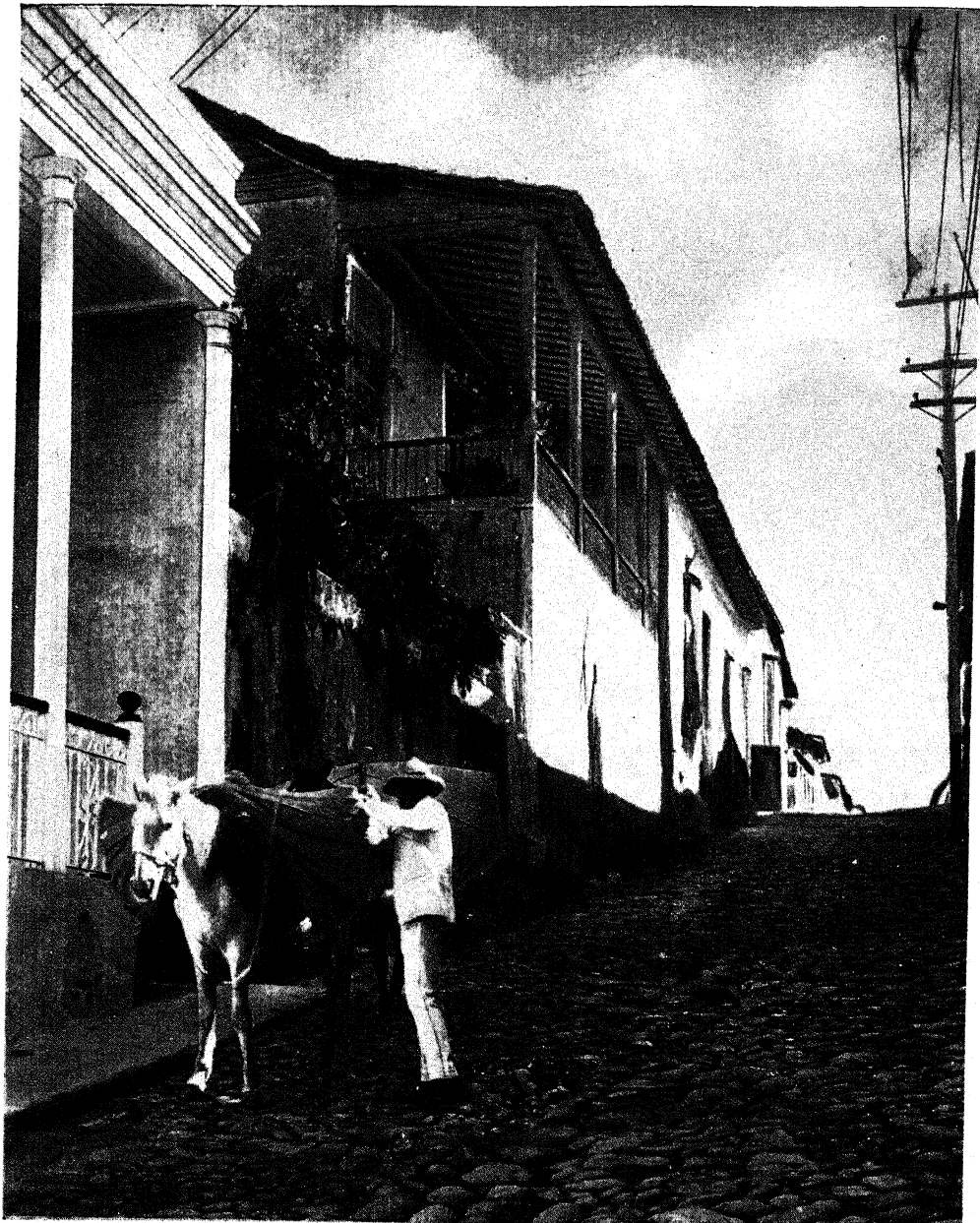
### *The Key City of the West Indies*

Havana, on the other hand, is a striking combination of the old world and the new. "Key of the New World and Bulwark of the West Indies" was the title granted it by the kings of Spain. Four strong forts were built to defend it, among them Morro Castle, at the harbor mouth. Now tourists flock here every winter and as a gay resort it is unrivaled on this side of the Atlantic. Yet as a background for all the gaiety there remain old houses and fortresses which have seen troubled days, and which serve as reminders of the city's long history.

The capital of Cuba is cosmopolitan, but gains additional charm from the Spanish atmosphere yet lingering in its streets. Life here seems full of grace and pleasure; it is not necessary to be strenuous. The opera, the theatre, motion pictures, rich clubs, great hotels, the Casino and the ever-available lotteries furnish amusement for all kinds of people. And there are many different types in Havana: Cubans of all shades, Spaniards and other Europeans, Chinese, Central American mestizos, West Indian mulattoes, Haitian Negroes, North Americans.

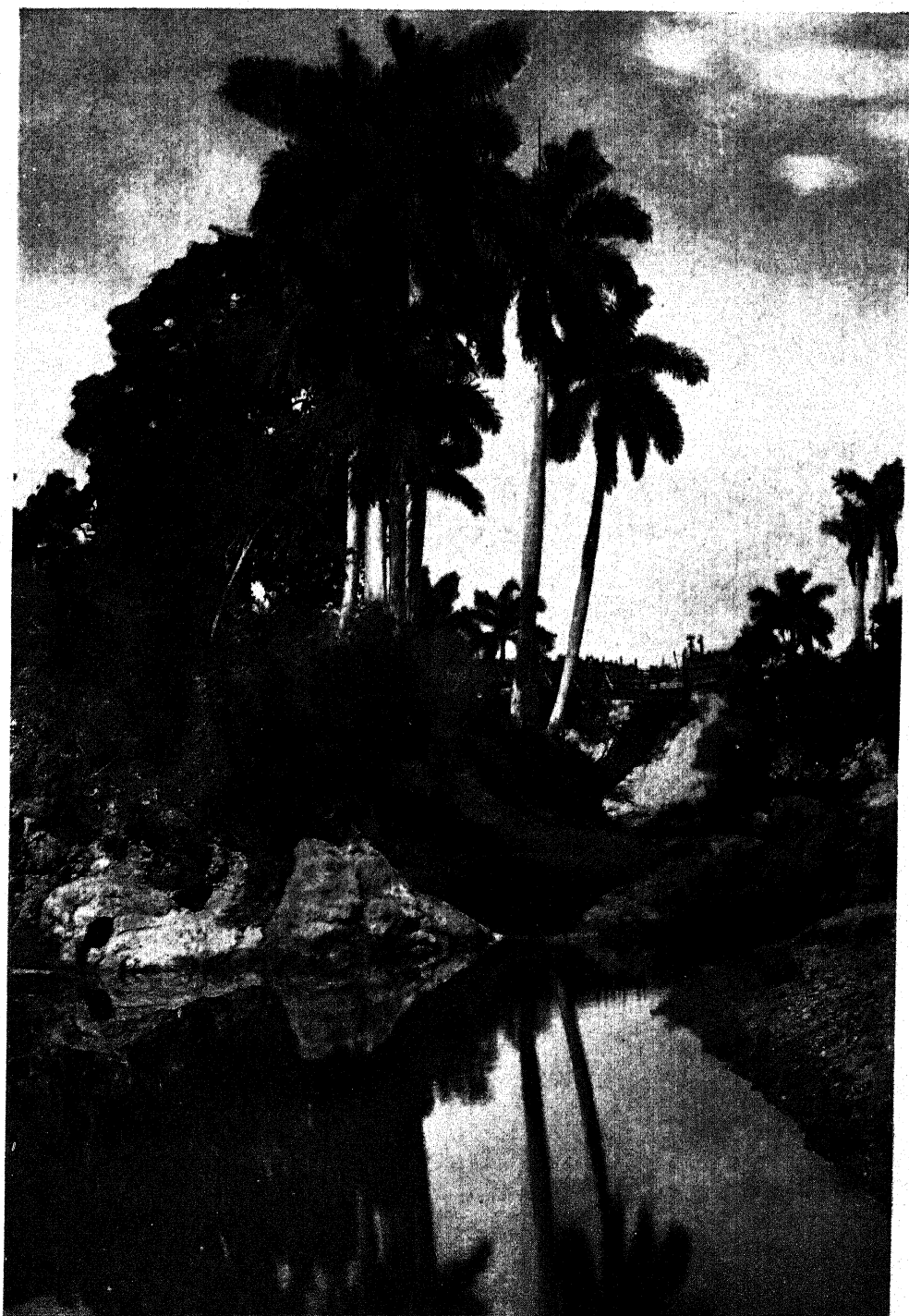
### *A Gay and Charming Capital*

The streets are very narrow. An old law required that they should be so, with the idea that they would be less sunny and hot. Originally they had no pavements, for all people of any importance rode, and the rest had to take the risk of being run down. But in the newer western suburbs there are broad avenues, great houses and beautiful gardens, while atop the sea wall runs the magnificent Malecón drive. The houses, some built of brick, some of white limestone, are often plastered outside, and the plaster is of all colors, from white or cream to pink,



AMERICAN PHOTO STUDIOS, HAVANA

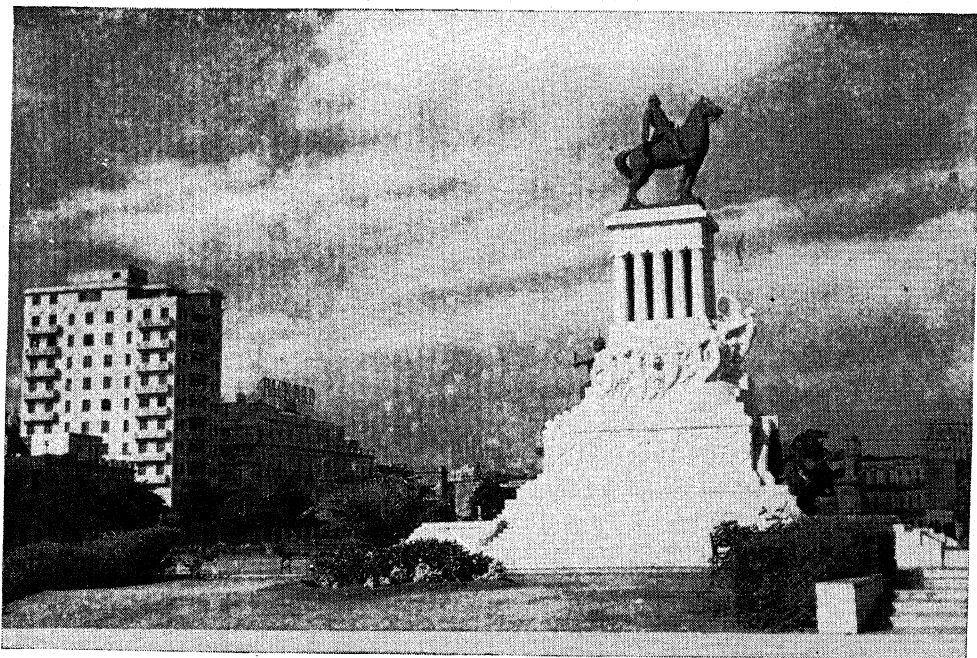
**THE COBBLED STREETS OF OLD SANTIAGO** are narrow and climb steeply up hill and down, for the city is built on ground that rises sharply from the edge of a fine big harbor. Seen from aboard ship at the narrow harbor entrance, the red tiled roofs show up brightly against a background of green mountains, with the blue bay shining below. The houses are low and their thick walls are solidly built; as we can see here, some are painted white and others are of any color that strikes the owner's fancy—pink, blue or yellow. Many are old, like the one which belonged to Cortés before he set out to conquer México in 1519. There are no chimneys, for since Santiago is the hottest city in Cuba, heating systems are superfluous and cooking is done with charcoal, which does not make much smoke. In Santiago it is not necessary to go to market to buy food, because there are so many peddlers that almost everything is brought right to the door. This man's donkeys carry panniers full of fresh fruits and vegetables from the country roundabout.



AMERICAN PHOTO STUDIOS, HAVANA

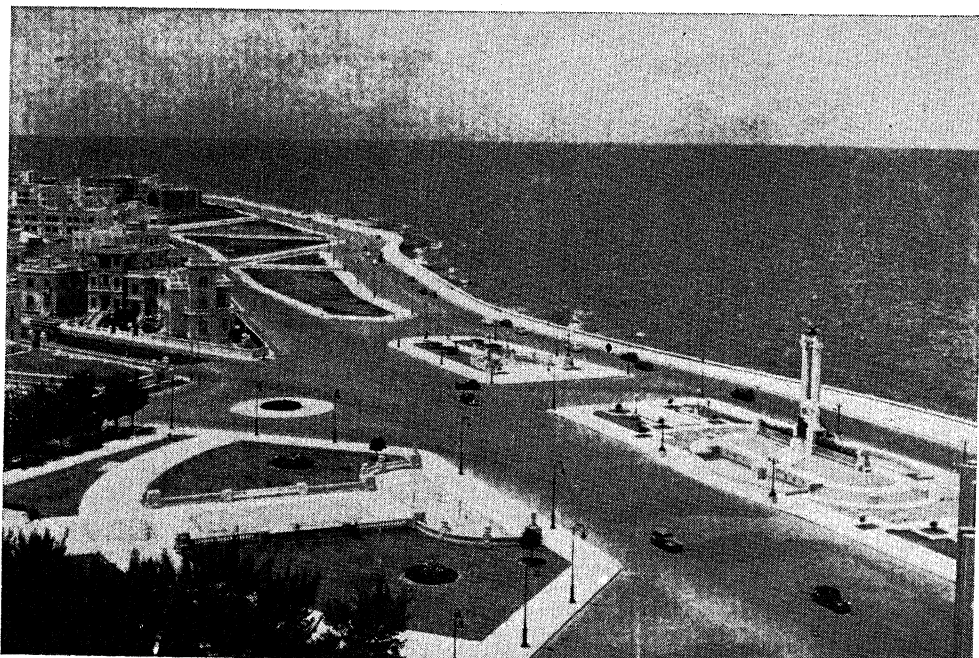
**GRACEFUL PALM TREES** are the most striking feature of the landscape in almost every part of Cuba, and they are useful as well as artistic. The royal palm, especially, is always a thing of stately beauty, whether growing in long straight avenues on some plantation or by the banks of a stream which reflects the slender trunk and delicate leaves.





#### GOMEZ MONUMENT A FAMILIAR LANDMARK IN HAVANA, CUBA

Visitors to Havana always remember the Maximo Gomez Plaza, dedicated to the general of the liberation, national hero of Cuba. His statue overlooks the beautiful Maleçon Drive (below).



PHOTOS, BLACK STAR

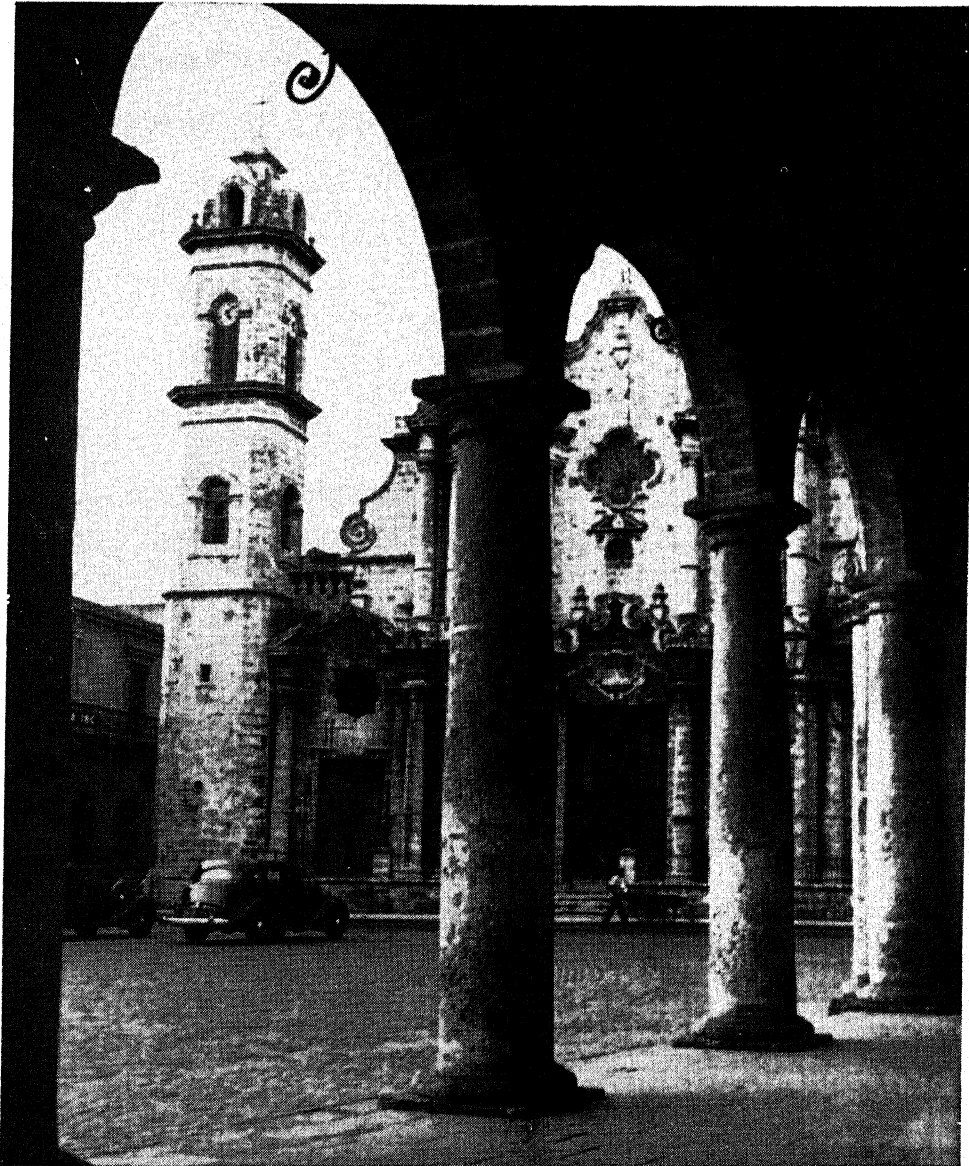
#### THE MALEÇON, FAMOUS PROMENADE ALONG HAVANA'S SHORE LINE

One of the most picturesque thoroughfares in the world is the Maleçon, a promenade and drive that runs for miles along the coast. It is bordered by modern buildings and landscaped parks.

## THE PEARL OF THE ANTILLES

red, blue and even yellow. It is a curiously mixed town, for private dwelling houses, factories, churches, schools, convents and shops may all be found in the same street. Cigar factories are more numerous and important than any other kind.

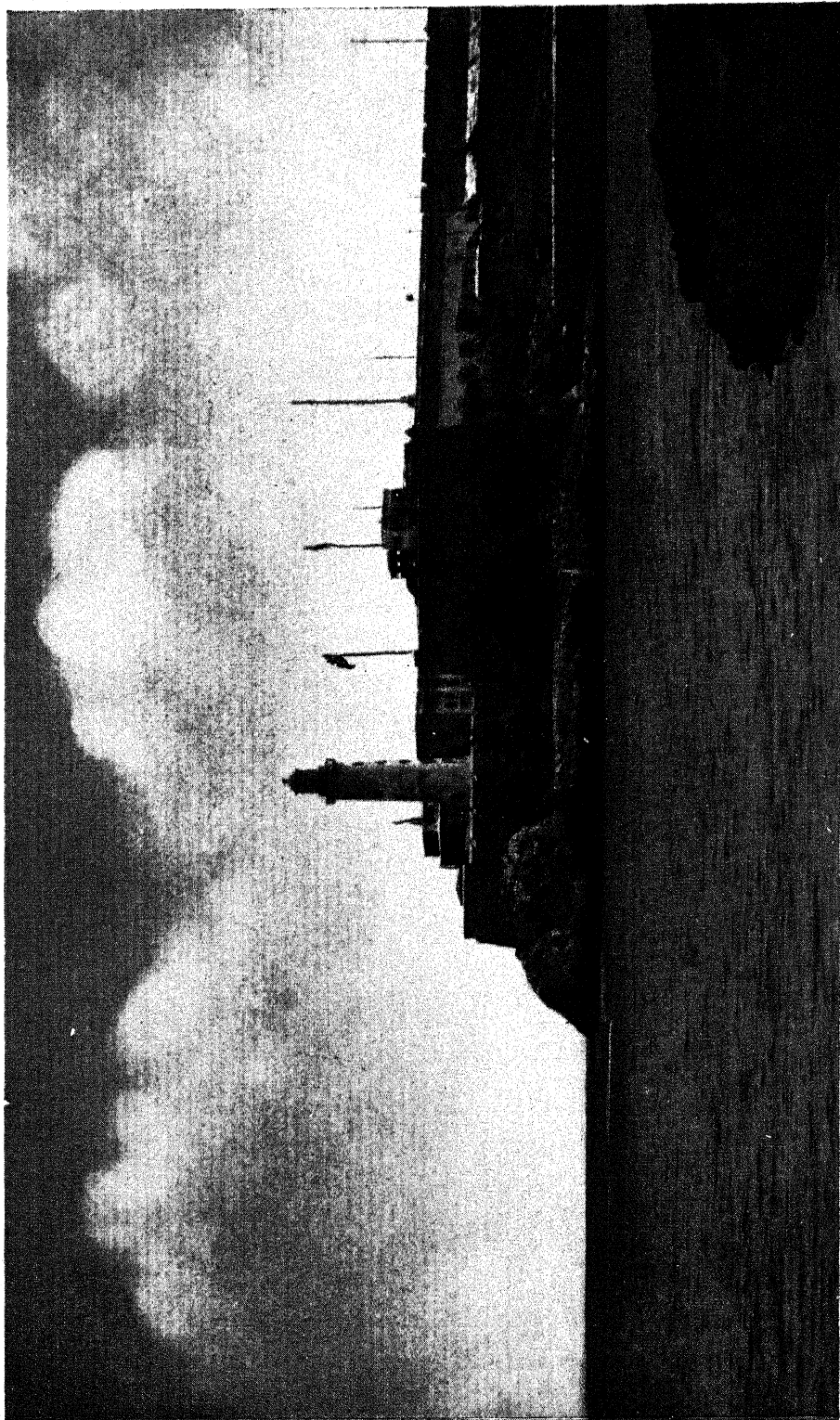
Another valuable Cuban trade product is cabinet wood. The state alone possesses over a million acres of forest land, containing mahogany, cedar, ebony, rosewood and sandalwood; there are also logwood, *lignum vitæ*, the *ceiba* and dye-



PHILIP GENDREAU

### HAVANA CATHEDRAL THAT MAY HAVE HELD BONES OF COLUMBUS

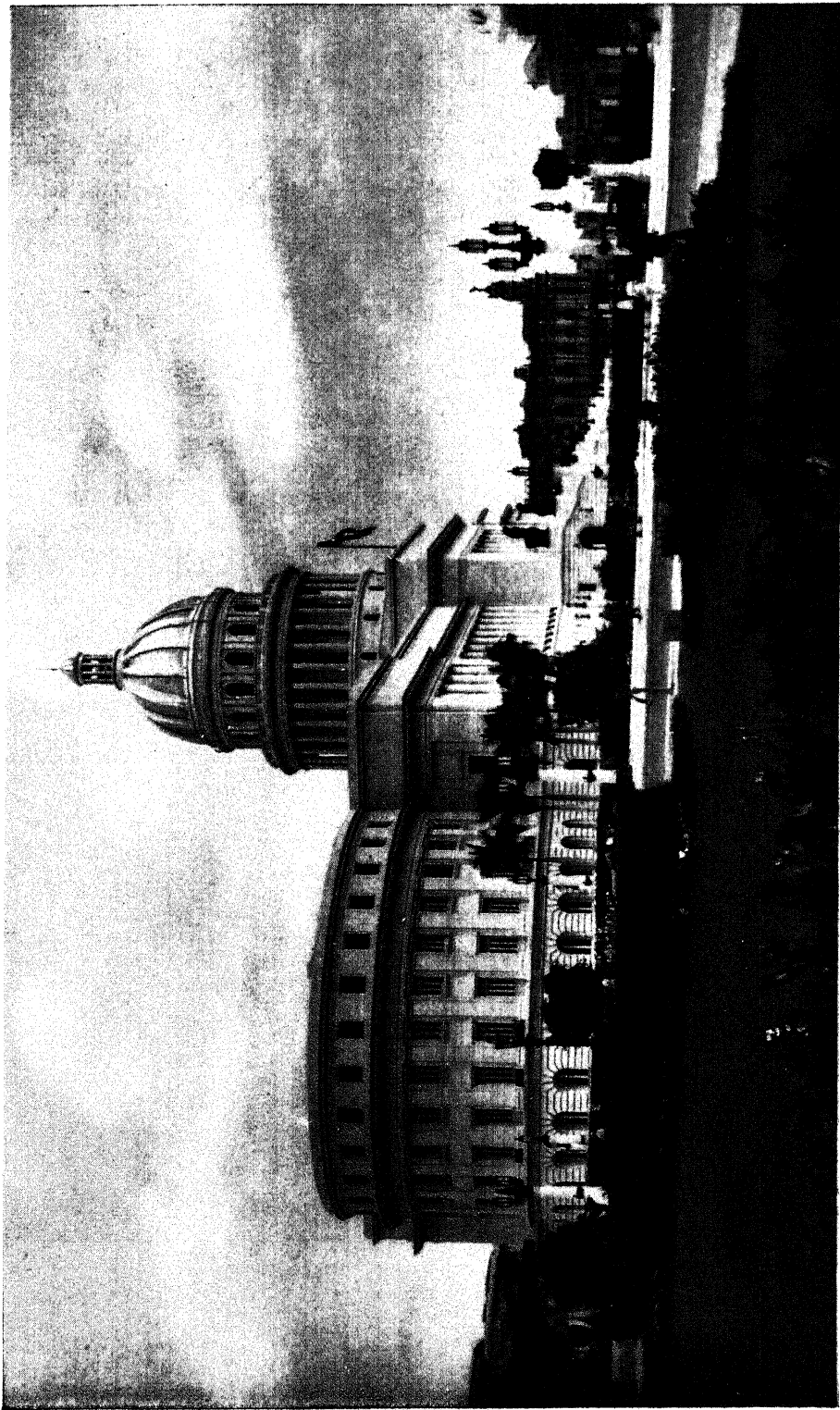
Bones that may have been Christopher Columbus' earthly remains were buried in this cathedral between 1795 and 1898 when they were removed to Spain. Some claim the bones were his son's.



AMERICAN PHOTO STUDIOS, HAVANA

**A SYMBOL OF VANISHED EMPIRE** is Morro Castle on its rock at the entrance to Havana Harbor. It is a grim reminder of the days when pirates lay in wait for Spanish treasure ships, and fortifications were built to ward off raiders and protect the galleons at anchor. To-day

though the guns are still in place, the very walls of the hoary stronghold look dwarfed when a big liner enters the narrow channel. Here we see El Morro from across the harbor mouth, near the point where the famous Prado joins the curving Malecón drive.



AMERICAN PHOTO STUDIOS, HAVANA

CUBA'S CAPITOL is a palatial domed structure of white marble facing one of the many beautiful plazas in Havana. If we were to climb the wide steps and enter the doorway behind the columns, we should find broad corridors and sweeping stairways and tinted glass windows which

throw soft colors on marble floors and walls. Magnificent in design and construction, the Capitol is yet but one of many fine modern buildings which give to historic Havana an air of twentieth-century splendor in pleasing contrast with its old-world charm.



## THE PEARL OF THE ANTILLES

woods. Many forests have been depleted by short-sighted sugar planters who burn over and clear large tracts in very wasteful fashion. The trees, shrubs, flowers and vines of Cuba offer the naturalist an apparently inexhaustible field. The variety of birds is equally bewildering. Besides many migrants from North America, the two hundred species include the mocking-bird so well known in the southern United States, humming-birds, woodpeckers, owls, parrots red and green, and brilliant little trogons and tanagers. Falcons are common and in the swamps the beautiful flamingo breeds. The turkey buzzard is seen everywhere and is protected by law. Most of the common animals like horses, dogs, goats, donkeys and cattle were brought by the Spaniards. There are plenty of snakes, but few, if any, are poisonous. The largest is the handsome python, called *maja* by the Cubans. This monster will readily dispose of a goat for its dinner, but is afraid of men. Crocodiles infest

the swamps, and turtles lay their eggs in holes scooped from the sandy beaches.

On the Isle of Pines, some ninety miles due south of Cuba's narrowest part, there are few wild animals and no poisonous snakes. The plague of the place is the small sand-fly, the *jejen*, the bite of which is like the burn of a hot coal. This large island is barren in part, but in the north it is mountainous, and the scenery is exquisitely beautiful. So long ago as 1800 it was famous as a health resort, on account of its many mineral springs. Sugar-cane, coffee, pineapples, tobacco and very fine grapefruit are grown there. Being near Havana, the island is better known than some other parts of the republic, but the appreciative traveler does not wish to neglect any of Cuba's fertile provinces and famous old cities, for everywhere is found either the glamour of past happenings or the fascination of developments to come. As a nation, Cuba is still young, and those who know her best feel certain that she has a wonderful future before her.

### CUBA: FACTS AND FIGURES

#### THE COUNTRY

Largest island in the West Indies, lying 100 miles south of the Florida Keys, with the Bahamas northeast, the Gulf of Mexico northwest, Yucatán 130 miles southwest, the Caribbean Sea and Jamaica to the south, and Haiti on the east across the Windward Passage. Length, 730 miles; average width, 50. Area, including smaller islands, 46,736 square miles. Population, 5,348,000.

#### GOVERNMENT

A republic, which by constitution of Oct. 1940, is semi-parliamentary in character. The president, elected for 4 years, appoints the premier. There are a Cabinet and a Congress of two houses. The constitution provides for many liberal social and labor laws and limits the amount of land owned by individuals and corporations. The country is divided into six provinces and 119 municipalities.

#### COMMERCE AND INDUSTRIES

Agriculture chief industry. Sugar-cane the great crop; second largest producer in the world, 6,675,000 short tons; also molasses and alcohol, by-products. Tobacco crop about 76,000,000 pounds. Exports include: sugar, including molasses (90% of total export value), tobacco, confections, ores, metals, fibers, fresh

fruit, hides, vegetables. Livestock about 4,600,000 head. State-owned forests, about 1,250,000 acres. Meat, fish, dairy products, honey, chemicals, sponges, lumber, shoes and textiles are some of the other products. Chief manufactures: cigars, cigarettes, sugar. Chief imports: cereals, machinery, textiles, automobiles, meats, iron and steel, coal, pharmaceuticals.

#### COMMUNICATIONS

Railway mileage, 2,989, not counting 2,892 miles of private lines on sugar estates. Highway mileage, 2,040 and being increased. Busses connect the cities. There are 12,447 miles of telegraph wire and 150 radio and radio-telegraph stations. Air service with the United States, Central and South America.

#### RELIGION AND EDUCATION

Catholicism dominant. Education free and compulsory; 498,286 children attending public schools under 9,500 teachers; 587 private schools with about 72,000 pupils; 140 night schools; 21 institutions of advanced education; normal schools and University of Havana.

#### CHIEF TOWNS

Havana (Habana), the capital, 676,376; Holguín, 171,997; Camagüey, 155,827; Marianao, 135,815; Santa Clara, 122,241; Santiago de Cuba, 120,577; Sancti Spiritus, 104,578.



# THE INDIES OF THE WEST

## *Islands and Islanders of the Caribbean Sea*

When Columbus discovered the Bahamas and Cuba he thought they were islands lying off the coast of Asia, and called them the West Indies because he reached them by sailing westward. Actually, they lie east of the American continent and guard the entrance to the Caribbean Sea. Spanish supremacy in these waters was long maintained, although challenged by the fleets of England and France. Now Great Britain, France, the United States and the Netherlands possess most of the lovely and fertile islands. But there are three republics: Cuba, previously described, the Dominican Republic and Haiti, of which we shall read in a later chapter. Here we are to learn something of the mixed population of the West Indies and of the now vanishing races that flourished there in the days before the coming of the Spanish galleons and adventurers from all Europe.

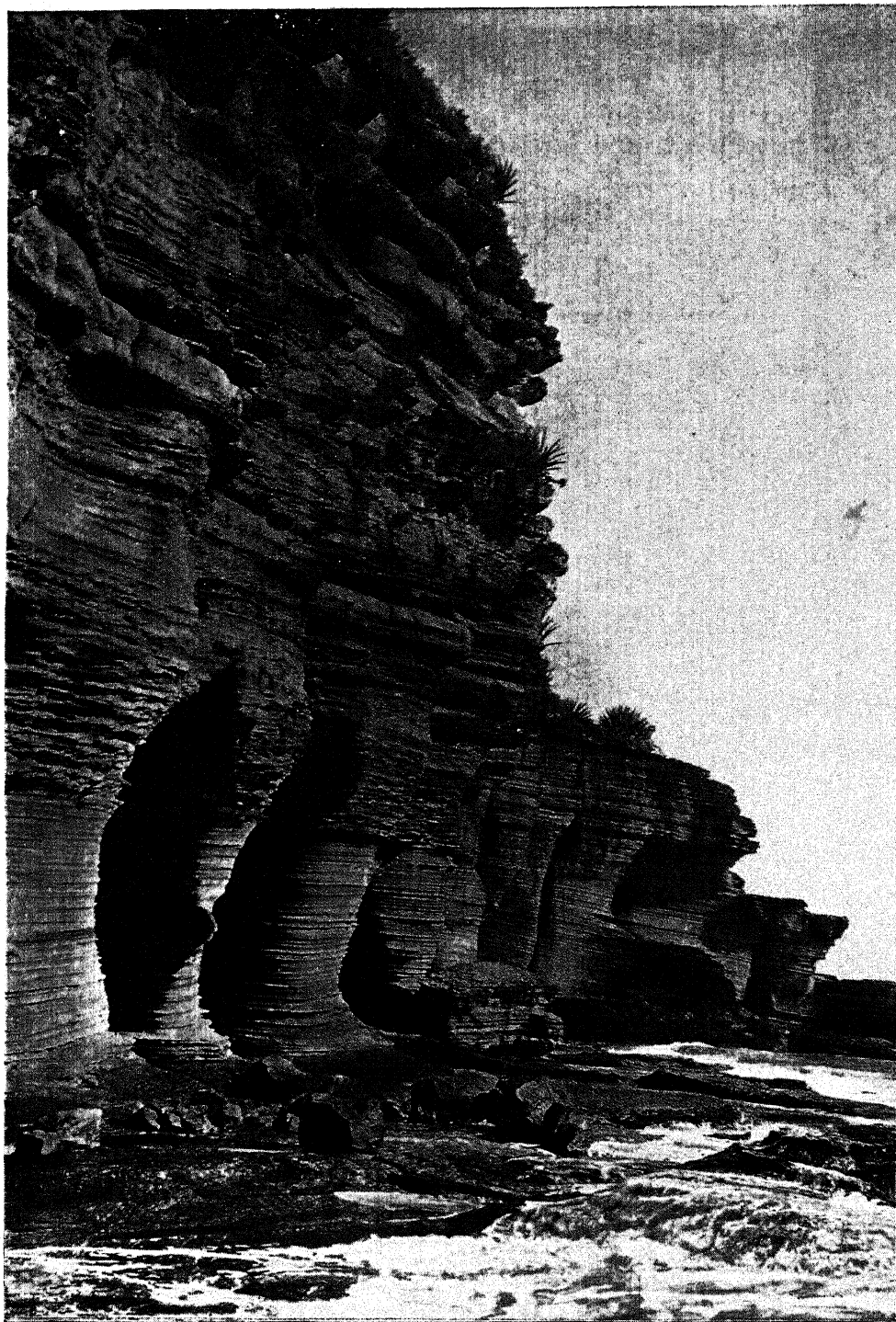
THE first glimpse of the New World that greeted Columbus after his long voyage was a West Indian island, and for the next three centuries the West Indies and the Spanish Main which lay beyond them were the constant lure and inspiration of sailor adventurers from almost every European port. Frenchmen, Englishmen, Dutchmen and Danes came to plunder Spanish ships and towns, to grow rich trading in slaves and to colonize on their own account. The fame of the rich islands attracted fortune-hunters of all kinds. Through the West Indian channels passed Sir Walter Raleigh on his search for treasure, stopping to caulk his ships with pitch from Trinidad. In many fights among their bays and creeks, Sir Francis Drake acquired that skill and seamanship which, later, defeated the Spanish Armada. The island of Tortuga, off Haiti, was the first base of the buccaneers, and at Port Royal in Jamaica they spent their plundered wealth. There is scarcely an island in the archipelago which does not recall their adventures. They have left to the Caribbean a legacy of romance.

The West Indies form a chain of islands which extends about fifteen hundred miles, from Florida to the northern shores of South America. Between the islands and Central America lies the Caribbean Sea. Cuba is the largest island; Hispaniola is next and is divided between the republic of Haiti and the Dominican Republic. These two islands, which are described elsewhere, together with Puerto Rico and Jamaica make up the Greater Antilles.

Stretching southward from Puerto Rico to Venezuela are the Windward and the Leeward Islands, which form the Lesser Antilles. There are other islands more detached, such as Barbados and Trinidad, and the Curaçao group off the South American coast. Curaçao and its dependencies belong to the Netherlands, as do Saba and two or three other small members of the Leeward group.

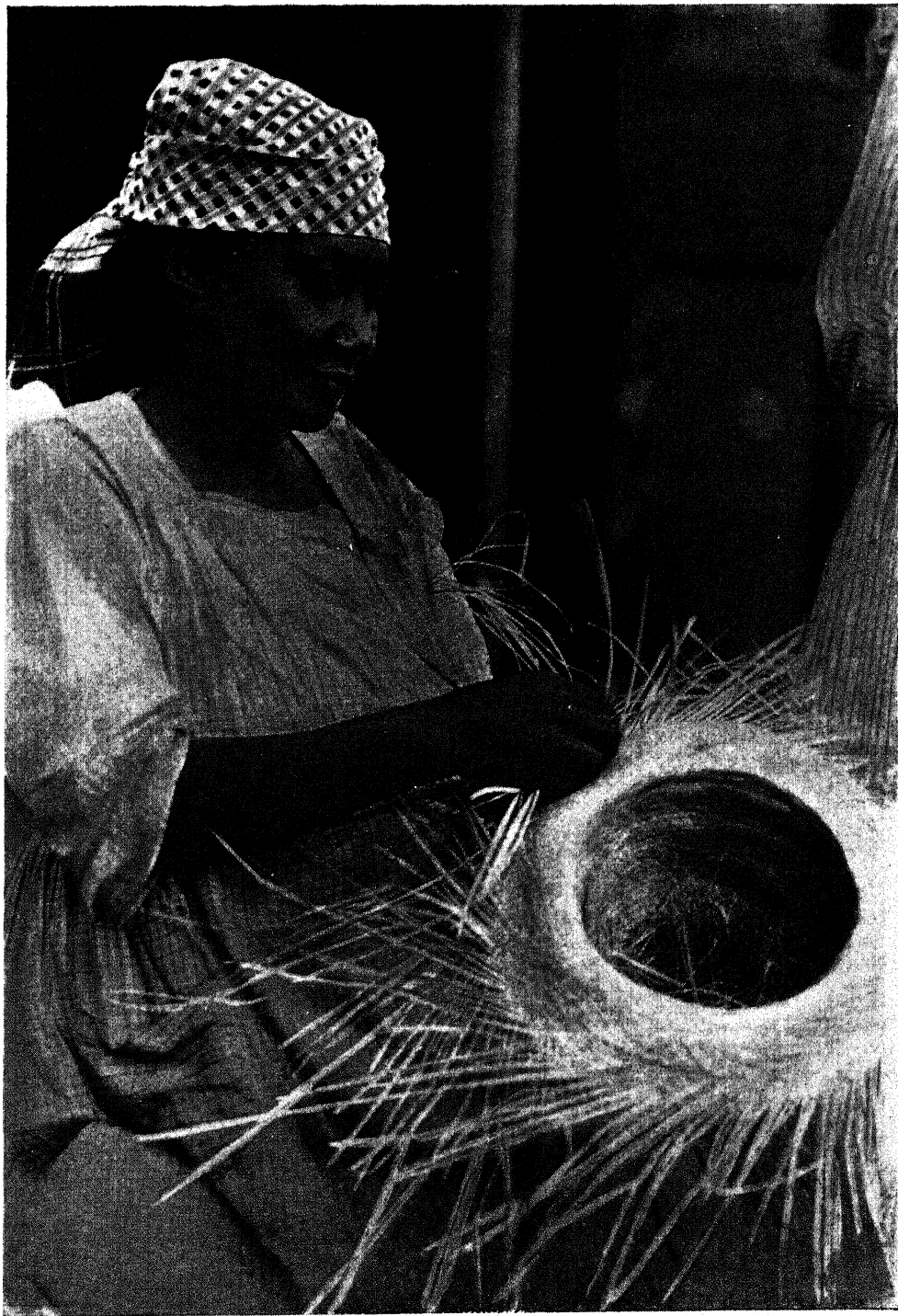
Among the Leeward Isles, Antigua, Barbuda, Anguilla, St. Kitts and Nevis, Montserrat and Dominica are British. Great Britain has St. Lucia and St. Vincent in the Windwards, as well as the Bahamas, which lie to the northeast of Cuba, and Barbados. France has the Saints, Guadeloupe, Marie Galante and Désirade, all in the Leewards, besides Martinique in the Windward group. Close to Puerto Rico are the Virgin Islands, a cluster divided between Great Britain and the United States. St. Thomas, St. John and St. Croix are the American ones.

In the autumn months the West Indies are liable to be swept by hurricanes. The southernmost isles of Trinidad, Tobago and Grenada, however, seem to lie outside the hurricane zone and are almost free from these devastating tempests. The name hurricane is often loosely used for any great storm of wind, but the violent movement of the air in a real West Indian hurricane is always of a twofold character. The wind rushes round in a great swirl or circle at from thirty to one hundred and fifty miles an hour; the circle



EWING GALLOWAY

**WIND AND WATER** were the untiring sculptors who carved these great cliffs at Antigua into massive columns known as the Pillars of Hercules. Antigua, one of the British West Indies, is a small island in the Leeward group. Much of its shoreline is rocky and beautiful, and inland the countryside is green with palms and fields of sugar-cane.



THOMAS F. LEE FROM EWING GALLOWAY

**STRAW HATS IN THE MAKING** are but one of the many colorful sights to be seen in picturesque Willemstad, the capital of Curaçao in the Dutch West Indies. The houses have high gables and steep tiled roofs like those of a Dutch city, and here and there in the streets blonde Dutchmen are conspicuous among the many black and brown faces.



ALCOA STEAMSHIP COMPANY

#### AMBLING ALONG A STREET IN JAMAICA'S CAPITAL

Donkey carts share the highway with automobiles in modern Kingston. However, the island of Jamaica is so mountainous that these sure-footed and sturdy animals are essential in hauling produce over steep, narrow trails. Jamaica is the largest British island in the Caribbean; and Kingston, with a well-protected harbor, is its biggest seaport.

measures anything from one hundred to five hundred miles in diameter. The storm, with its calm center and its furiously raging circumference, takes a curved course until its force is exhausted.

Hurricanes which strike the West Indies in the neighborhood of the Windward or the Leeward Isles often start near the Cape Verde Islands and are drawn westward across the Atlantic and the Caribbean. They generally sweep the Lesser Antilles and one of the larger islands, but as a rule miss Cuba. Then they either turn sharply northward up the coast of the United States and swing back

into the Atlantic, or else keep on across the Gulf of Mexico. The records of the September storms for forty years show that their normal course takes them over the peninsula of Florida, and it was one of these that demolished Miami in September 1926. The Jamaican towns of Morant and Port Royal were laid waste as recently as August 1951. Millions of dollars worth of property was damaged and thousands were left homeless.

The terrible hurricane of 1928 devastated Marie Galante, Guadeloupe, Montserrat, St. Croix, Porto Rico, Turks and Caicos islands, the Bahamas and large

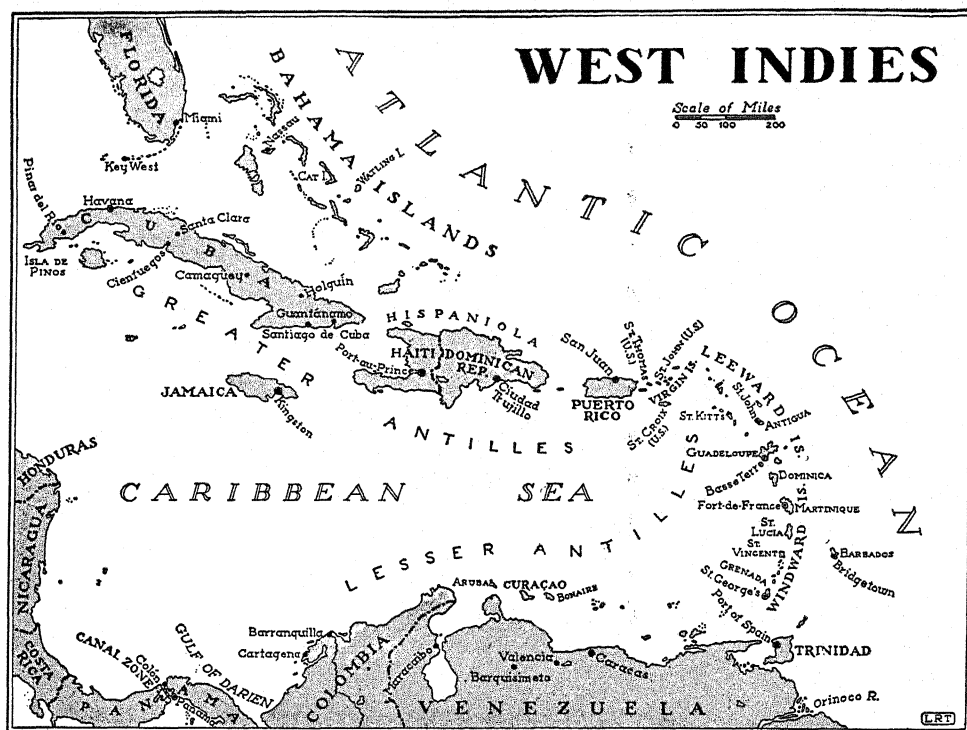
## THE INDIES OF THE WEST

areas in Florida. The loss of life was appalling and the damage ran into many millions of dollars. Hurricanes seldom arrive without due warning, for the United States maintains a highly efficient weather bureau in the West Indian area, which signals the movements of approaching storms to the different islands.

At the end of the fifteenth century, when the West Indies were discovered, they were inhabited by two races very different both in temper and appearance. The Arawaks, a gentle and peace-loving people, occupied the islands of the north; the fierce and warlike Caribs resided in the smaller islands and waged relentless war on all newcomers, as well as on their neighbors. Not many descendants of the aborigines remain. From the name of

the ferocious Carib tribe the English language obtained the word "cannibals," as a general term for man-eating savages. A curious habit of both Arawaks and Caribs was to change the natural shape of their babies' heads by compressing the skull. The Arawaks flattened the forehead, and the Caribs squeezed it on each side, making it high and square. The Arawaks were very badly treated by the Spaniards, who enslaved and finally exterminated them. The Caribs, armed with bows and arrows, fought desperately against the Spaniards, French, English and Dutch, one after the other, and in some of the islands managed to hold their own for quite two hundred years.

Every shade of color is found among the people of West Indian birth. Black



### THE WEST INDIES, SENTINEL OF THE NEW WORLD

The West Indies form a great archipelago which extends, as you can see from the map, from the southern tip of Florida to the northeastern coast of South America. The archipelago consists of three distinct groups of islands—the Bahamas, to the north; the Greater Antilles, which include the large islands of Cuba, Jamaica, Hispaniola and Puerto Rico; the Lesser Antilles, which extend in a graceful curve from Puerto Rico to the coast of South America. The West Indies are of great strategic importance. They shield the Panama Canal and bar the way to an invader aiming at the lands that lie on the Caribbean Sea and the Gulf of Mexico.

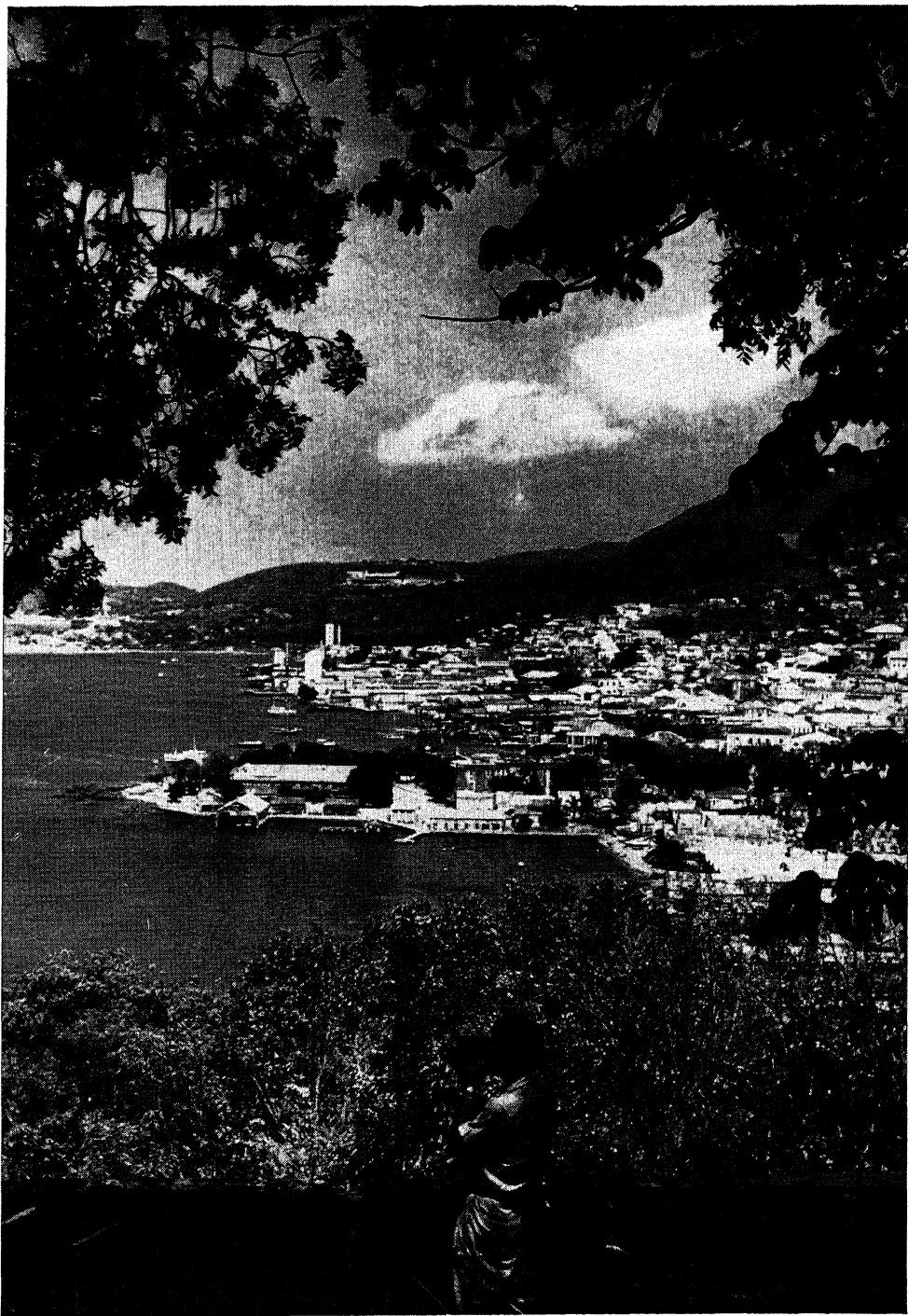




ALCOA STEAMSHIP COMPANY

**A MOUND OF STONE THAT WAS ONCE A DANISH SUGAR MILL**

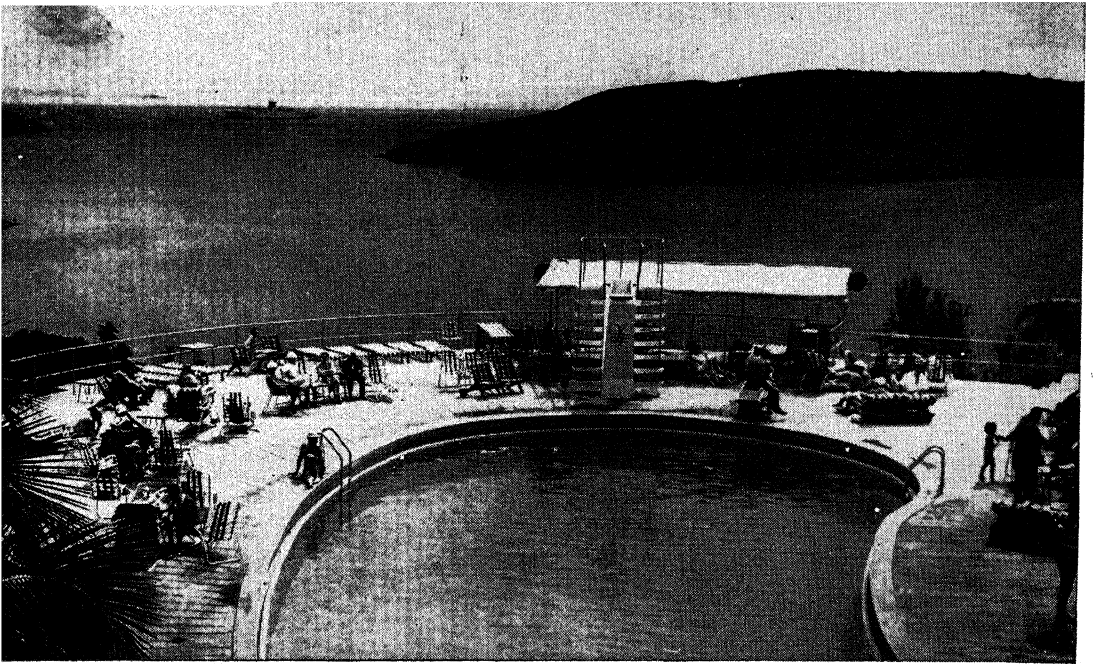
Among the American Virgin Islands there are still many evidences of the long Danish occupation. Large sugar-cane plantations were cultivated by the Danes, who built odd stone mills.



ELIZABETH HIBBS

### CHARLOTTE AMALIE—SET IN A BOWL OF GREEN HILLS

Balmy trade winds keep the climate of the Virgin Islands delightful all year. One of the loveliest locations is that of the capital of the American territory, on St. Thomas Island.



#### AN ISLAND PLAYGROUND WHERE EVERY PROSPECT PLEASES

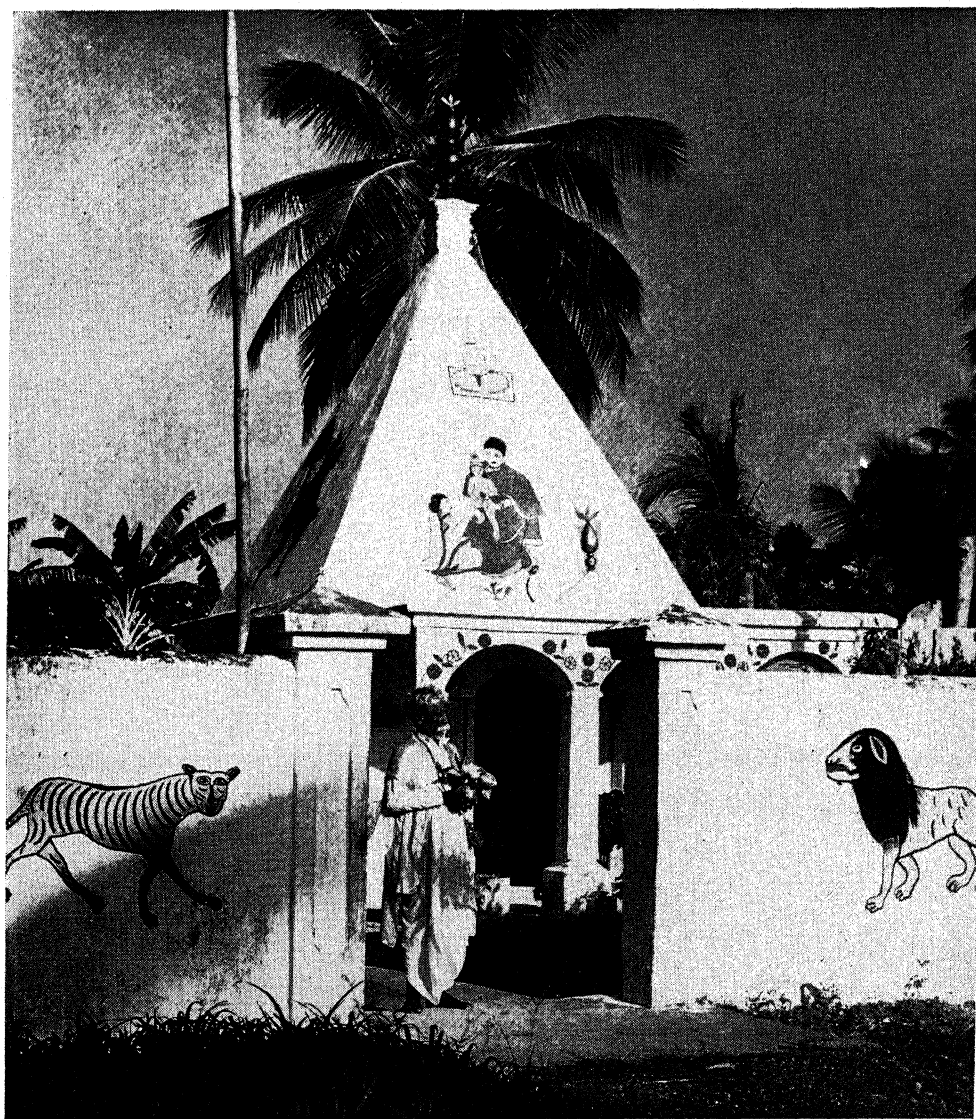
Imagine going swimming in this beautiful pool which is built out over the sparkling waters of the harbor of Charlotte Amalie. The Virgin Islands present the visitor with an exhilarating mixture of warm sun, soft breezes, salt water, verdant hillsides, fine hotels and a touch of Old World charm. Catering to visitors is an important business in the islands.



PHOTOS, EWING GALLOWAY

#### HAULING CANE TO A SUGAR MILL ON THE ISLAND OF ST. CROIX

St. Croix is a center of the sugar industry in the Virgin Islands as it is the most fertile in the whole group. As the islands are small, the production cannot begin to compare with that of Cuba, for instance. However, there have been sugar plantations on the Virgin Islands for hundreds of years, and they help to provide work for the permanent population.



ALCOA STEAMSHIP COMPANY

#### A HINDU TEMPLE IN TRINIDAD

A charming little Hindu temple is sheltered by tropical trees near Port of Spain, the thriving capital of the island of Trinidad, off the coast of Venezuela. The Hindus reverence all animals and consider some of them, especially the cow, sacred. Trinidad is a British possession. Its extremely valuable asphalt lake, 114 acres in extent, seems to be inexhaustible.

men, brown men, red men, yellow men and white men are all to be seen here. There are mulattoes, who are half-Negro and half-Caucasian; quadroons, who are three-quarters white; and octoroons who have very little Negro blood. There are pure-blooded Negroes who are descended from the slaves imported from Africa in

great numbers years ago, East Indians whose parents were brought in as laborers when the slave trade was abolished, and others who have come in since as colonists. Quite a few Chinese are to be seen. There are also the Spanish, British, French, Portuguese, Dutch and Danish settlers, and many North Americans.





MOORE MC CORMACK LINES

#### A PORTABLE FOUNTAIN FOR COCONUT MILK IN TRINIDAD

The vendor balances her home-made fountain on her head. To serve the coconut milk, she holds a glass under the faucet with one hand, and turns the spigot on and off with the other.



## THE INDIES OF THE WEST

As we have said, most of the West Indian Negroes are descendants of the victims of the slave trade, which began early in the sixteenth century. However, it is possible that a few Negroes reached the New World earlier and under quite different circumstances. There is evidence, for instance, that one of the pilots who sailed with Columbus may have been a Negro.

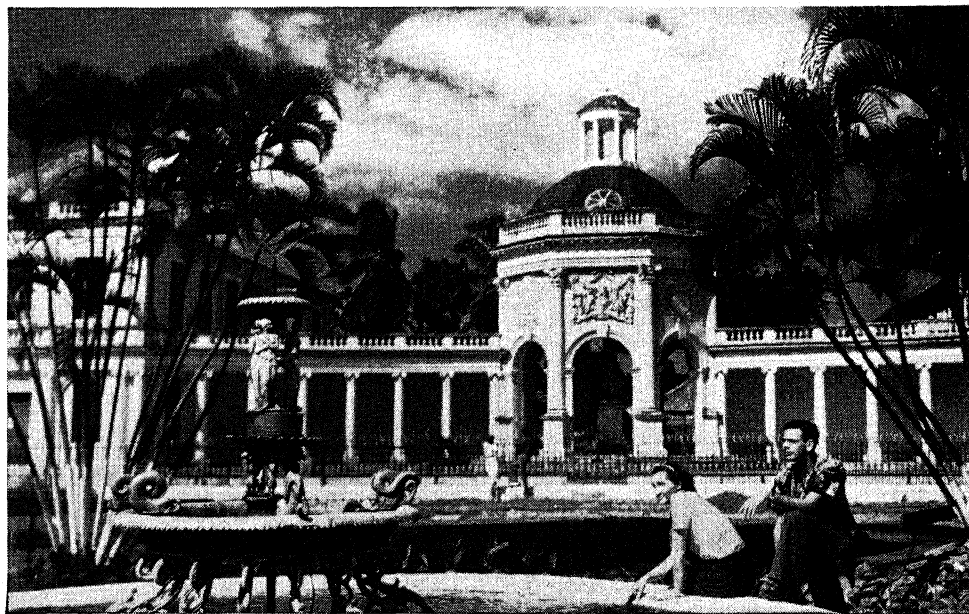
Since slavery was abolished, the living conditions of the Negroes have been improving by slow degrees. Yet on some islands they still live in what would be squalid slums were it not for the tropical vegetation that masks the ramshackle dwellings.

Though educational opportunities have also lagged, the doors are opening ever wider, especially for gifted Negroes. Most of these people represent the basic labor force of the islands, which is largely unskilled.

In spite of their difficulties, however, the Negroes of the West Indies have a great belief and pride in themselves. The women in particular have the carriage of

queens. Without benefit of formal teaching their love of music and relish of wit find highly original outlets. The best-known example of these qualities is calypso—a ballad made up by the singer on the spur of the moment and sung to a strong African beat. Frequently the words are a satire on current events. Sometimes they are improvised to honor a famous visitor. Calypso originated in Trinidad, at annual pre-Lenten carnivals.

The West Indian Negroes are very particular about their dress. At their work on plantations or docks, they may be barefoot and carelessly clad, but they invariably change to their best clothes when they go into town to shop, to find amusement or to visit. On the outskirts of towns, especially on a holiday, you are likely to see a group of women busily pulling on stockings and high-heeled pumps. They have very sensibly waited until they are almost in town before they put on shoes that belong only on city streets and would be a handicap on roads. They will stop again at the same place on their way



JAMAICA GOVERNMENT

### THE HANDSOME RODNEY MEMORIAL IN SPANISH TOWN, JAMAICA

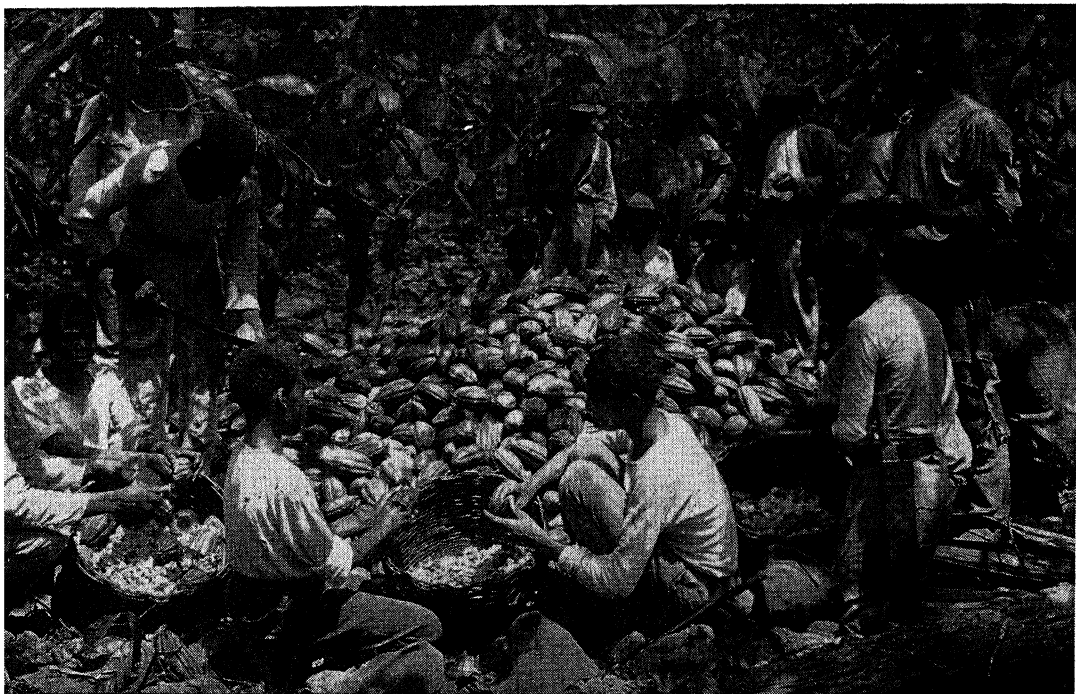
The domed structure commemorates a British naval officer who won a victory over the French in the West Indies in 1782. Spanish Town is one of the oldest settlements on the island.



JAMAICA GOVERNMENT

#### HUSKY MYSORE OXEN, FROM INDIA, YOKED IN TANDEM

The cream-colored beasts with curved horns are used to pull heavy loads in their native land. In recent years a number have been imported to work on West Indies plantations.



UNDERWOOD & UNDERWOOD

#### FIELD WORK IN TRINIDAD—OPENING RIPE COCOA PODS

The pods are cut open with sharp knives and the insides scooped out. In the center of the sweet, pinkish pulp are twenty to thirty hard seeds, or beans. These are dried in the sun.



ALCOA STEAMSHIP CO.

#### HARVESTING A TANGLED THICKET OF RIPE SUGAR CANE

Sugar cane grows in such a tangled mass that it is best cut by hand. Wielding a machete, a heavy knife, the worker cuts the stem close to the root and lops off the useless top.

## THE INDIES OF THE WEST



MOORE-McCORMACK LINES

**DRUMS** and other instruments in Trinidad's "steel bands" are made from metal barrels.

back, take off their finery and make a bundle of it to carry home on their heads.

The black people are sunny and good-tempered; many of them are very poor, but they have lively imaginations and humor, and are faithful and devoid of malice. Trouble sits upon them lightly, and they are all fond of music. The languages they speak include every imaginable variation of French, English and Spanish.

All sorts of delicious fruits and unexpected kinds of fish and vegetables make up, with chickens and guinea-fowl, the West Indian's daily fare. Green oranges and grapefruit, the tiny bananas known as "lady's fingers," mangoes, pineapples and grenadillas, guavas, pomegranates and the avocado pear are a few of the luscious products of the islands.

Flying-fish and "oysters grown on trees" are often on the menu. The oysters are picked off the roots of mangrove trees to which they cling. In Dominica and St. Kitts "mountain chicken" is a special delicacy. This is really the crapaud, or web-footed frog. Yams, cassava and other vegetables grow profusely.

The chief product of the West Indies as a whole used to be cane sugar. After the abolition of slavery, the profits from the sugar plantations dwindled seriously, but are now of increasing importance once again. Molasses and rum are by-products wherever raw sugar is manufactured. The depression in the sugar industry had the good effect of stimulating other lines of agriculture. Two of the most important industries which have developed within recent times are the growing of bananas and of cacao. To Jamaica, especially, the popularity of the banana has proved of great significance, as the island exports twenty million or more bunches every year. Dominica, Montserrat and St. Lucia have developed the lime-growing industry. Other valuable products of the West Indies are coffee and coconuts, citrus fruits, pineapples, spices, copra and tobacco.

Barbados, St. Vincent and Antigua are famous for their cotton, which is called "sea-island" cotton. Nutmegs and arrowroot, logwood for dyeing and mahogany for furniture are other commodities produced, while the Bahamas export sisal hemp and sponges. Most of these are vegetable products, and it is only in Trinidad that mineral deposits in the form of petroleum and asphalt contribute substantially to the island's wealth.

The Virgin Islands are known for the bay rum manufactured there. Its chief ingredient is oil from the leaves of the bay trees which grow wild on the tiny island of St. John. After the twigs have been picked, the leaves are distilled and the oil sent over to St. Thomas to be made into bay rum. The St. Thomas product is considered the best on the market. St. Croix, largest of the Virgin group, specializes in sugar and cattle.

Besides the three main islands, and without including the thirty belonging to Great Britain, there are nearly fifty tiny islets in the group. They have not always belonged to the United States, and their history has been very checkered. Columbus sailed into this miniature archipelago on his second voyage, and rather than think up a name for each individual

## THE INDIES OF THE WEST

island he christened them collectively for the virgins who were martyred with St. Ursula. As the martyrs were said to number eleven thousand, this allowed plenty of names and to spare. For many years no settlements were made, then the various European powers who had holdings in the Caribbean began to disagree about the ownership of the Virgins. Spaniards, British, French, Dutch and Danes all controlled some part of the group at one time or another. England and Denmark finally divided the islands and in 1917 the United States purchased the Danish ones.

The West Indian islands are of two distinct types—coral and volcanic. Barbados and Dominica present this contrast strikingly. Barbados is a coral island and therefore comparatively flat; Dominica is of volcanic origin, with mountains rising to five thousand feet. When Queen Isabella of Spain asked Columbus to describe Dominica, he is said to have crumpled up a piece of parchment and dropped

it on the table before her. The average annual rainfall there is very high, and roads and bridges are likely to be washed away by the torrents as fast as they are made. This island claims to have 365 rivers, one for every day in the year. Many of them pour down to the sea through wild and beautiful forest valleys. Barbados, on the other hand, has smooth level roads and good hotels, and almost every part of it is cultivated.

Jamaica is the largest British island in the West Indies. Lying south of Cuba, its towering peaks can be seen far out at sea. If, like Columbus, one approach it in May when the pimento or allspice tree is in bloom, the air will be filled with spicy fragrance. Jamaica was discovered in 1494, and colonized by the Spaniards in 1509. They kept it for about 150 years, when it was taken by the British, and British it has remained ever since.

Kingston is now its capital. For a long time Port Royal was the chief town, but it owed its importance rather to the buc-



NETHERLANDS WEST INDIES TOURIST COMMITTEE

**HARVESTING ALOES** in Bonaire, in the Dutch West Indies. The fleshy plants, armed with spines, yield a drug known as bitter aloes, and substances used in chemicals and paints.





ALCOA STEAMSHIP COMPANY

**THE NUMBER OF KNOTS** that the women of Martinique wear in their head kerchiefs shows what part of the island they come from and also whether they are having good or bad luck.



ALCOA STEAMSHIP COMPANY

**FLYING FISH** at play are among the marine delights of the sparkling West Indian waters. A Barbados fisherman holds one of the finny creatures that resembles a model airplane.



BAHAMAS NEWS BUREAU DEVELOPMENT BOARD

**WATER-FRONT MARKET** in Nassau. Fishing and farming folk from the far-flung Out Islands of the Bahamas bring their produce here, sailing the long distances in small craft.

caneers, who made it their headquarters, than to peaceful citizens or traders. There Sir Henry Morgan collected ships and crews for his famous expeditions against Porto Bello, Maracaibo and Panamá, and at Port Royal his desperadoes squandered their loot. When he became governor of Jamaica he hung those of his comrades who kept on buccaneering without his permission, but still the city gloried in its reputation for wealth and wickedness, until it was destroyed by an earthquake in 1692. Kingston was founded the next year by the survivors.

Earthquakes of great severity occur in the West Indies at long intervals. A terrible one devastated Kingston itself in January, 1907. It was a hot, sunny afternoon; suddenly there was a sound like the wind whistling, followed by a roar and rumble like a mighty avalanche. The ground was rocked violently, people were

thrown out of windows and through doors, then down came buildings and houses, crashing thunderously and sending up a black dust which hung like a pall over the city. In a short time fire had started to complete the ruin. Happily such a disaster is rare; although, at certain seasons, Kingston must always be on the alert for hurricanes.

Much of the beauty of Jamaica lies in its wonderful colors; flowering shrubs of brilliant scarlet, yellow or white and masses of rich green trees add to the beauty of the landscape. Waterfalls are numerous and the lovely Blue Mountains rise to a height of seven thousand feet. When the Río Cobre is in flood, its waters gleam like bright new copper, hence its name—the Copper River. For the grandeur of its scenery, Jamaica is well called the Queen of the Caribbean.

Puerto Rico, the most important ter-

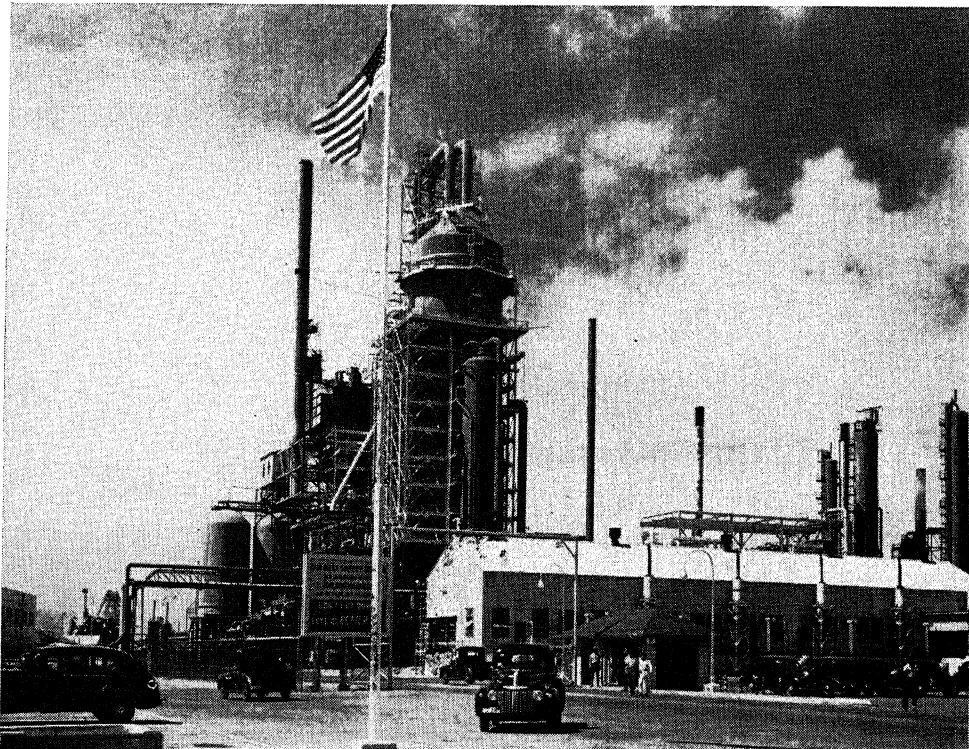
## THE INDIES OF THE WEST

ritory of the United States in the West Indies, retains its old name, meaning "rich port." Its mountains are lower and its vegetation less luxuriant. But it is an exceedingly fertile island, nevertheless. It has a dense population, the majority of whom are white. It came to the United States as a result of the Spanish-American War. Puerto Rico was early settled by Spaniards from Santo Domingo. The massive walls and castle of San Juan were built by Ponce de León, one of the most famous of the conquerors. His white house still stands on the wall above the harbor from which he sailed on his search for the Fountain of Youth. The Indians said this marvelous spring would make an old man young again. Ponce de León, however, found in the wilds of Florida not youth but a mortal wound, and died in Havana on his way back.

Like Cuba, Puerto Rico makes sugar

and tobacco its most important crops. All the low coastal lands are cultivated as canefields and the larger plantations maintain great centrals, or mills, for grinding the cane. The steep hillsides are covered with cheese-cloth "tents" which protect the tobacco plants. Some Puerto Rican cigars are almost as fine as the choice Havana product. Besides these two traditional crops, coffee, grapefruit, pineapples, coconuts and oranges are normally produced in large quantities.

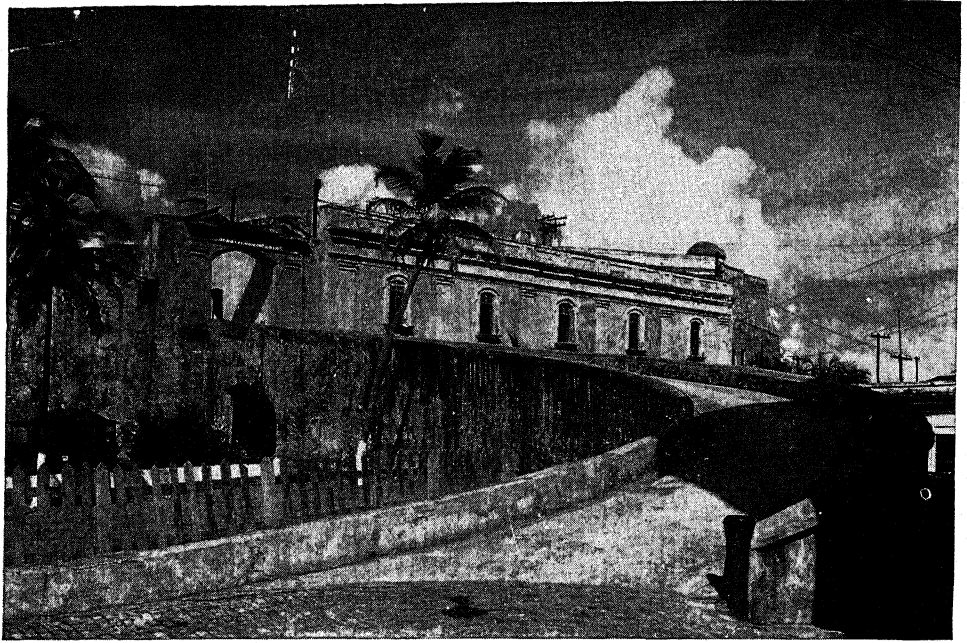
For some years Puerto Rico suffered from a severe depression. There were two main reasons for this: overpopulation and a one-crop (sugar) economy. Late in the 1940's, however, the island began to make a strong comeback. Under the government program called Operation Bootstrap, employment has risen, with higher wages pushing up the standard of living; industry has expanded consider-



NETHERLANDS WEST INDIES TOURIST COMMITTEE

**OIL REFINERY** in Aruba, one of the Dutch West Indies. Twenty miles off the coast of Venezuela, Aruba is the great transshipment and refining center for oil from Venezuela.





Courtesy Puerto Rican Line

#### THE ENTRANCE TO SAN CRISTOBAL CASTLE AT SAN JUAN

This steep ramp leads to a massive fortification on a hill at the eastern end of the oldest part of the city. Construction of the original fort was begun in 1631 but it was not completed until 1771. Beneath the fort are many tunnels, some of them still used for storing ammunition, and dark rooms where prisoners once were held.



Courtesy U. S. Housing Authority

#### A GROUP OF MODERN HOUSES IN CAGUAS

Caguas is the most important inland city of Puerto Rico. This housing unit, called Caserio la Granja, was built here for low-income families with funds from the Public Works Administration of the United States. There are 78 dwelling units with room for 400 persons. The development is now administered by the Puerto Rico Reconstruction Administration.





Courtesy Puerto Rican News Bureau

#### A SENTRY BOX ON THE RAMPARTS OF MORRO CASTLE

Castillo de San Felipe Del Morro (Morro Castle), built on a steep bluff 100 feet high, has guarded the entrance to San Juan harbor for centuries. Construction began in 1586, and the fortress was considered impregnable before the invention of steel and high-powered explosives. Time and again it resisted attack by English, French and Dutch fleets—and buccaneers and pirates.



GENDREAU

#### STREET SCENE IN FORT-DE-FRANCE, CHIEF CITY OF MARTINIQUE

In this picturesque seaport and seat of government for the island, the houses are vividly colored, and when they do not have balconies there are shutters that may be closed against the hot sun. From childhood the Negro women of Martinique learn to balance huge loads on their heads and are famous for their erect posture and graceful carriage.

ably, with many new factories being built; and agriculture has become better balanced, with more kinds of crops, although sugar is still important. Moreover, a determined effort has been made to wipe out slums; there are many low-cost, up-to-date housing projects.

There is a new spirit of enthusiasm in the island. In great part, it is a result of the fact that the Puerto Ricans today have their own constitution and are running their own affairs.

The folk songs of the Puerto Ricans are enchanting, and show their love of music and their feeling for the land.

One great need of the West Indies is better and more frequent communication between the different islands. In these days of easy and quick travel, they might be used far more as winter resorts than they have been yet. Tennis, golf and

cricket are very popular, and fishing provides excellent sport. Tuna and tarpon fishing are especially exciting. In the larger islands the roads are excellent for motoring. Tropical scenery of wonderful variety can be enjoyed with complete freedom from many tropical discomforts; the warmth is tempered always by sea breezes, and there are few dangerous reptiles. Gorgeous butterflies and hummingbirds and wonderfully colored orchids abound. Whether one goes to historic San Juan in Puerto Rico, to delightful St. Kitt's or green St. Croix in the Lesser Antilles, to lovely Jamaica or the coral islets of the Bahamas, one may enjoy all the pleasures and the rich, luxuriant beauty of the tropics. Here the trade winds blow over some of the loveliest, most fertile islands to be found anywhere in the whole, wide world.

## THE INDIES OF THE WEST

### THE WEST INDIES: FACTS AND FIGURES

The archipelago is roughly an arc extending from Florida to the Venezuelan coast between the Caribbean Sea and the Atlantic Ocean. Cuba and Haiti (treated elsewhere), Puerto Rico and Jamaica make up the Greater Antilles; the Lesser Antilles are divided into the Leeward, Windward and Curaçao groups; Barbados and the Bahamas are separate.

#### THE BAHAMAS (*British Colony*)

Some 700 small islands east of Florida and north of Cuba and Haiti; 20 are inhabited. Area, 4,404 sq. mi.; population, 81,000. Capital, Nassau (New Providence Island), 33,000. Administration: governor, Executive Council, Legislative Council and Representative Assembly. Total school enrollment is 17,800. Main exports are tomatoes, pineapples, citrus fruit, bananas and coconuts.

#### BARBADOS (*British Colony*)

Lies east of the Windward Islands; area, 166 sq. mi.; population, 211,682. Capital, Bridgetown, 13,800. Administration: governor, Executive Council, Executive Committee, Legislative Council, elected House of Assembly. School enrollment exceeds 32,900. Chief products: sugar, molasses, rum, cotton.

#### JAMAICA (*British Colony*)

Lies 90 miles south of Cuba. Area (with Cayman, 200 mi. to the west, and Turks and Caicos islands in the Bahamas), 4,613 sq. mi.; population, 1,416,987. Capital, Kingston, 125,000. Administration: governor, House of Representatives, Privy, Legislative and Executive councils. School attendance is about 136,000. Products: sugar, bananas, rum, cigars, raw cocoa, citrus juice and pulp, pimento, coffee, ginger, oranges, grapefruit, essential oils, honey.

#### TRINIDAD AND TOBAGO (*British Colony*)

Trinidad (1,864 square miles) lies just north of the Orinoco delta with Tobago (116 sq. mi.) on its north. Population is given as 635,843. Capital, Port of Spain, has 105,744 residents. Administration: governor, Executive Council, partially elected Legislative Council; voting by British subjects over 21. 296 elementary schools. Products: refined and crude petroleum, sugar, cocoa, rum, dried asphalt, asphalt cement.

#### LEEWARD ISLANDS (*British*)

Over 35 islands southeast of Puerto Rico. Antigua, with Barbuda and Redondo; Montserrat; St. Christopher (St. Kitts) with Nevis and Anguilla; also the British Virgin Islands (Tortola, Virgin Gorda, Anegada and Jost Van Dykes) with Sombbrero are British. Governed as a colony with a Governor, an Executive and Legislative Council. It has been recommended that Leeward and Windward Islands be put under one government with headquarters at St. Lucia, Windward Islands. Total area, 422 square miles; population, 114,647. Capital, St. Johns (Antigua), 11,000. Products: sugar, molasses, cotton, limes and fruit, rum, livestock, charcoal and coconuts.

#### WINDWARD ISLANDS (*British*)

Small group lying south of the Leewards. Grenada, St. Vincent, St. Lucia and Dominica form a British colony under one governor and each has its partially-elected Legislative Council. The Grenadines (about 12 islets) are divided between Grenada and St. Vincent. Area, 810 square miles; and the population more than 268,000. Capital, St. George's (Grenada Island). Products: cocoa, nutmeg, mace, other spices, cotton, sugar, molasses, copra, arrowroot (St. Vincent), lime juice and oil, bay oil, preserved fruit, oranges, bananas, coconuts.

#### PUERTO RICO (*United States Commonwealth*)

Lies east of Hispaniola; area, 3,435 sq. mi.; population, about 2,300,000. San Juan, capital, 357,205. Under 1952 constitution, governor and members of a 2-house legislature are elected from among islanders. Represented in Washington by resident commissioner. School enrollment, 565,000; vigorous adult-education program. Exports: sugar, tobacco products, rum, handkerchiefs, cotton clothing. Imports: rice, meat, lard and butter, milk products, shoes, automobiles, machinery. Telephones, about 46,000.

#### VIRGIN ISLANDS (*United States*)

St. Thomas, St. John and St. Croix in the Virgin Islands belong to the United States; administration: governor, 2 Elective Councils and a Legislative Assembly; literacy and residence qualifications for franchise. Area, 133 sq. mi.; and the population is 26,665. Capital, Charlotte Amalie (on St. Thomas), 11,460.

#### GUADELOUPE (*French Overseas Department*)

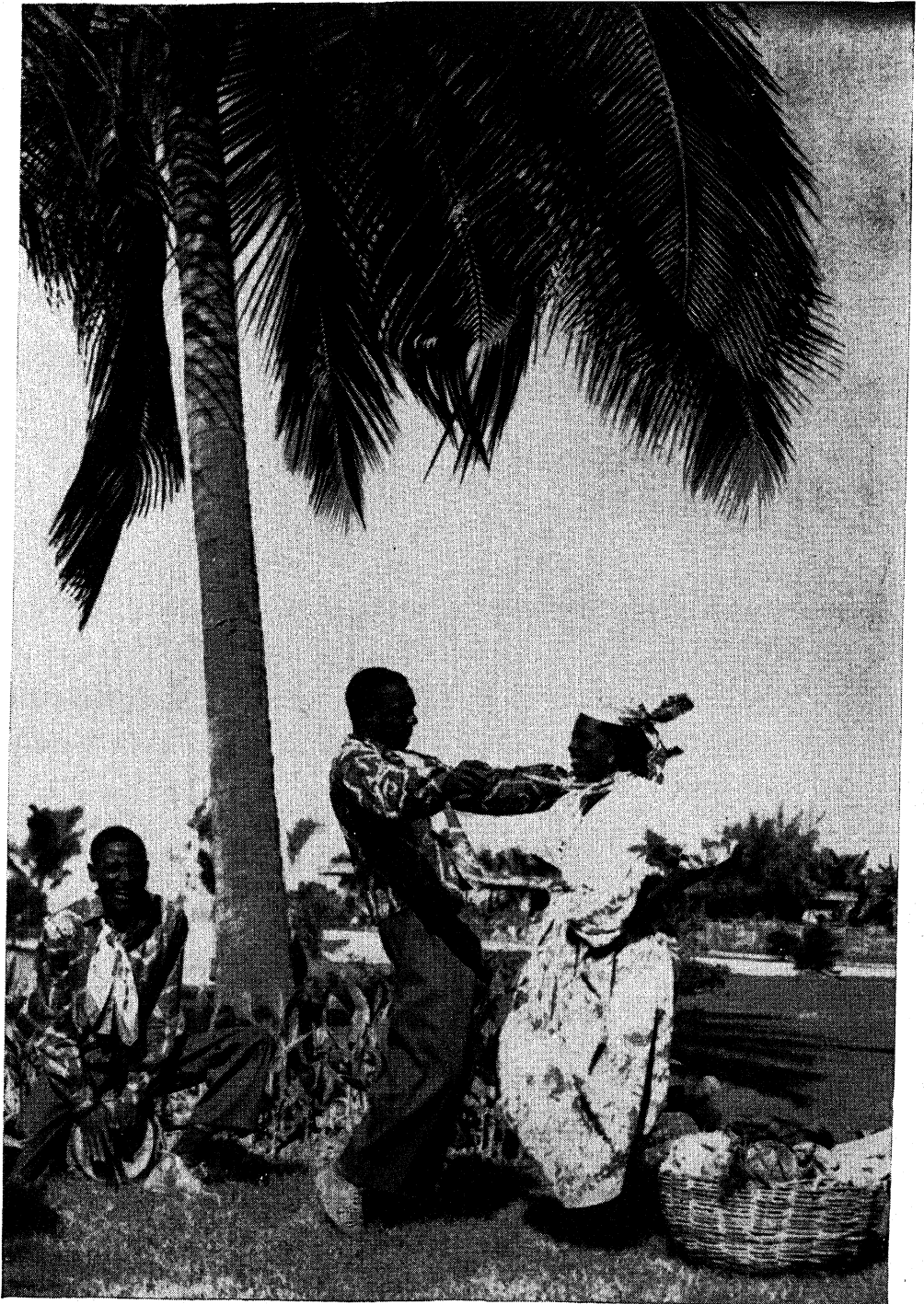
Situated in the Lower Antilles, consists of 2 main islands: Guadeloupe and Grande Terre; and 5 dependencies or small islands: Marie-Galante, Les Saintes, Désirade, St. Barthélemy and half of St. Martin. Total area is 688 square miles; population is 278,864. The government is administrated by a prefect and an elected General Council, and is represented in Paris. Education is compulsory; enrollment 32,546 pupils. Chief city is Pointe-à-Pitre, 45,000; capital, Basse-Terre, 12,500. The principal products (and exports) are sugar, bananas, coffee, cacao, rum and vanilla.

#### MARTINIQUE (*French Overseas Department*)

Martinique is a French department under a prefect, and an elected General Council, with representation in France. Area, 385 square miles; population, 265,000. Seat of government, Fort-de-France, 60,000. Products: sugar, bananas, cacao, coffee, tobacco, pineapples.

#### THE NETHERLANDS WEST INDIES

Three islands (Curaçao, Bonaire, Aruba) off the northern coast of Venezuela, and 3 smaller islands (St. Martin, Saba, St. Eustatius) in the northern Leewards. The total area is 383 square miles; population, 164,000. Capital, Willemstad (Curaçao), 41,000. Administrated by a governor, and an Executive and a Legislative council. School enrollment is now 33,842. Principal products are corn, cattle, phosphates. Refining of oil from Venezuela is chief industry.



HAITI TOURIST INFORMATION BUREAU

### TIME OUT: AN IMPROMPTU PAS DE DEUX IN PORT-AU-PRINCE

A happy couple in Haiti set aside their basket of fruit and vegetables for a moment to dance beneath the palm trees to the primitive rhythm their companion is beating out on his tom-tom.

# THE CRADLE OF THE NEW WORLD

## *Two Nations Share the Land Columbus Loved*

The island of Hispaniola, between Cuba and Puerto Rico, is not only the second largest of the West Indies, but one of the richest, most mountainous and most beautiful. Its misty peaks tower nine or ten thousand feet above the blue Caribbean. Rich forests cover the mountains, all kinds of tropical plants grow in the fertile valleys and mineral wealth awaits development. Columbus saw the value of the island, and established there the first Spanish colony. It is now divided between the Republic of Haiti in the west and the Dominican Republic in the east. Both countries have been troubled by revolutions and financial difficulties which have more than once provoked foreign intervention. For nineteen years United States Marines were in Haiti, and the finances of Haiti continued under supervision until 1947.

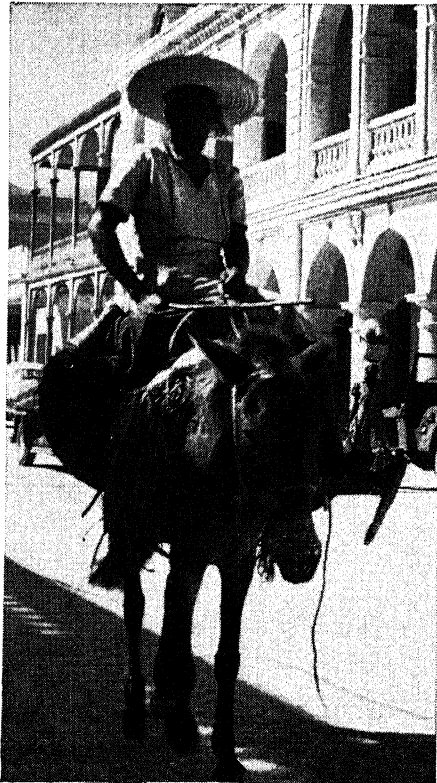
**B**EAUTIFUL, mysterious island, with its two restless little republics and their contrasting populations, has had a history as bizarre and topsy-turvy as any island in the turbulent West Indies.

It was discovered by Columbus on his first voyage, and called Hispaniola — "Little Spain." Attracted by the gold the Indians displayed, he immediately planted colonies, and the city of Santo Domingo was the first permanent white settlement in the New World. When the Indian population had succumbed to persecution and forced labor, the mines and sugar plantations were worked by African Negroes whom the slavers transported. But with the discovery of riches on the mainland Hispaniola lost its importance. In the seventeenth century French buccaneers from Tortuga seized upon the western part we now call Haiti, and made

of that a wealthy French colony. The eastern portion, Santo Domingo, remained in Spain's possession until 1795.

Haiti's prosperity was built on the sufferings of over-worked slaves, and when

news of the French Revolution reached the island the blacks rebelled. Inflamed by their sufferings and led by a remarkable Negro, Toussaint L'Ouverture, the slaves fought bravely and were everywhere victorious. Although Toussaint had been a slave he was well educated. He showed himself a skillful general and a great leader. All Haiti was in his power when Napoleon sent an army which seized the strongholds and captured Toussaint by treachery. He died a prisoner in France, but his fierce lieutenant, Dessalines, renewed the struggle and after bloody fighting finally drove the French from the land in 1803.



ELIZABETH HIBBS

### TO MARKET IN PORT-AU-PRINCE

The donkey plods along carrying rider and big baskets of vegetables and fruit.

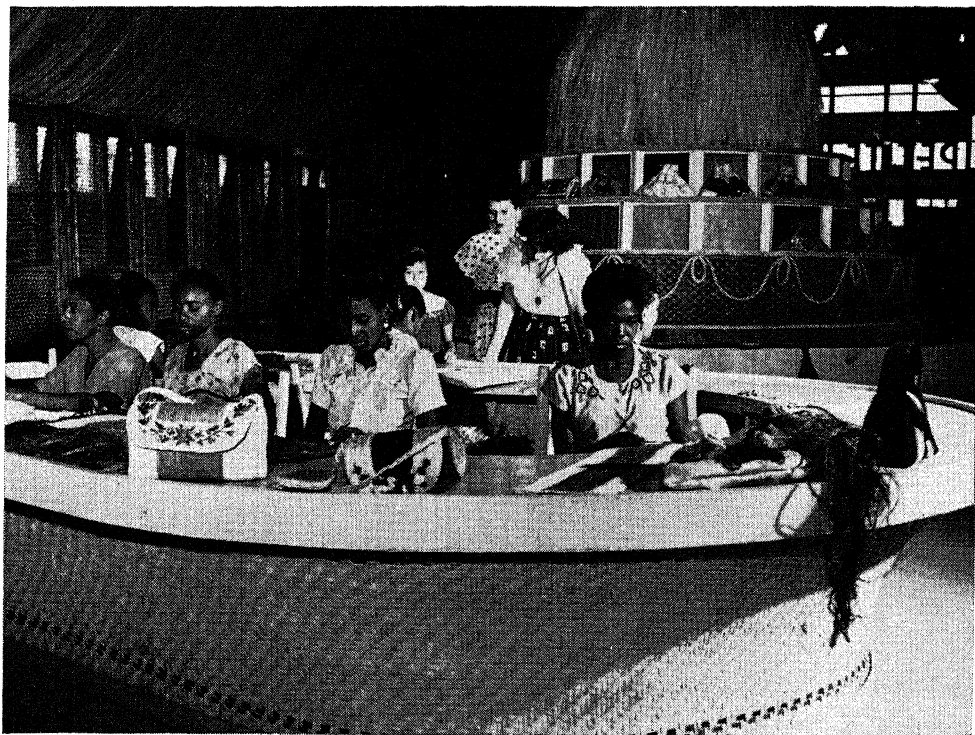


## THE CRADLE OF THE NEW WORLD

Two rulers then divided Haiti between them—Christophe in the north, and Pétion in the south. Christophe maintained a punctilious, magnificent court at Sans Souci, his beautiful palace, where white men were forbidden to come. He was a forceful man, obsessed with the idea of making Haiti strong enough to resist another French fleet. In the jungle at Cap Haitien stands the fortress of La Ferrière, which he raised as a last resort against invasion. Built with incredible toil three thousand feet high upon the steep mountain crest, the citadel's ponderous walls and useless cannon look out over the valleys and ranges of Haiti. It is now a deserted yet majestic ruin.

Haitian rulers usually had short but exciting careers, and revolutions came to be a habit. Finally in 1915 President Guil-

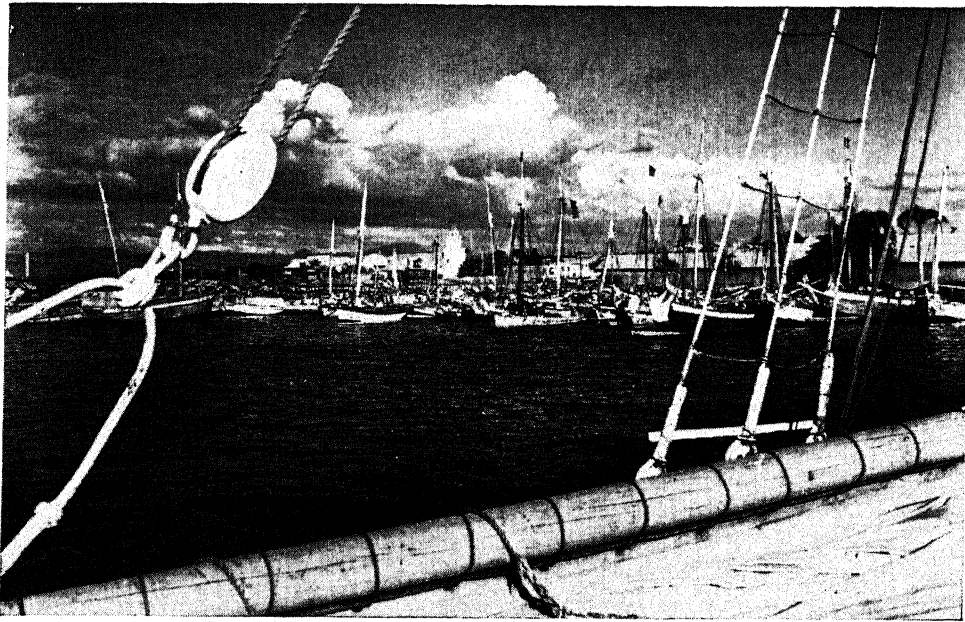
laume Sam was chased from his palace by revolutionists and took refuge in the French Consulate. When it was learned that two hundred political prisoners had been executed by his orders, he was dragged outside and killed in front of the building. To avoid European intervention and to maintain order, the United States landed a small force of marines and established a virtual protectorate over the republic. For nineteen years this supervision did much to benefit Haiti. The Americans trained a reliable police force, built over eight hundred miles of good roads and greatly improved public sanitation. Capital was put into railroads and sugar mills. To-day, production of cacao, sugar, tobacco and cotton is increasing as well as that of sisal and pineapples. Haitian coffee is excellent, just as it was



HAITI TOURIST INFORMATION BUREAU

### SHOW ROOM OF A FACTORY THAT MAKES "STRAW" HANDBAGS

The "straw" is sisal fiber, which may be used in the natural color or dyed in brilliant hues. In this factory the work is handled on an assembly-line basis. Cords are made by one group, handles by another and still other groups add embroidery or sprays of straw flowers. Then all the parts are put together. The finished bags are very attractive.



#### THE HARBOR OF HAITI'S MOST IMPORTANT CITY, PORT-AU-PRINCE

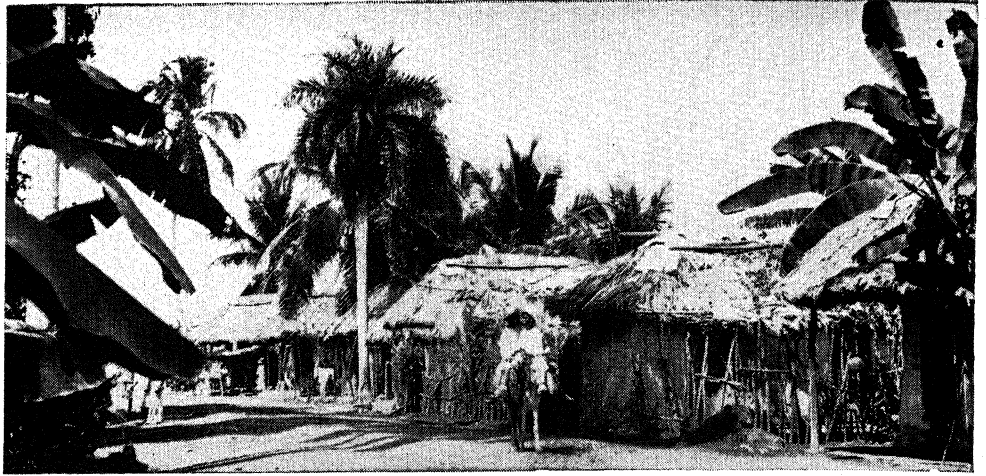
Hidden in the protecting Gulf of Gonaïves, Port-au-Prince gives the Republic of Haiti this excellent harbor for exporting her products, of which coffee is by far the most important. To the rest of the world it offers an entrance to the fascinating tropical city, where tourists come in winter and summer to relax in the genial atmosphere from the tensions of ordinary life.



PHOTOS, HAMILTON WRIGHT

#### THE HAPPY, CHATTERING MARKET PLACE, PORT-AU-PRINCE, HAITI

Haiti is largely agricultural, and the farmers of the neighboring countryside bring their farm produce and other wares into the capital's cathedral square. The market scene is a brilliantly colored panorama under a vivid blue sky and tropical sun—tropical fruits, vegetables, spices, beverages, dried fish, dresses, dishes, wooden bowls and earthenware jars.



ELIZABETH HIBBS

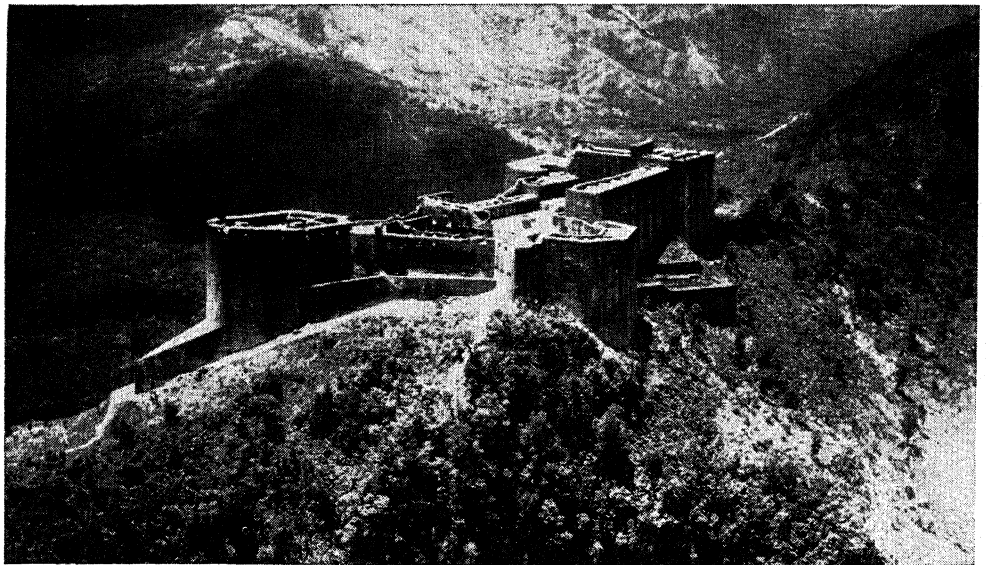
#### THATCHED HUTS IN AN OLD QUARTER OF PETIT-GOAVE

In subtropical Haiti, sturdily built houses are hardly necessary. The main requirement is shade, which the thatch roofs provide. The walls are clay; and the floors, earth.

in the days of the French planters. The schools are helping to form a more enlightened generation of peasants, who will know how to help develop their country's valuable agricultural and mineral resources.

The capital is Port-au-Prince, a spacious town where the dazzling white

houses are surrounded by mango, orange and palm trees. Creole, a debased form of French, is heard everywhere. Upper-class Haitians—lawyers, scholars or writers—speak pure French, and are usually educated in Paris. Thus Port-au-Prince and one or two other coast towns contain little centers of European



FREDERIC LEWIS

#### HENRI CHRISTOPHE'S GRIM CITADEL ON CAP-HAITIEN

Christophe, a slave who became a king of Haiti (1811-20), built the fort on a mountain top as a refuge. Eugene O'Neill's play *The Emperor Jones* is based on Christophe's life.

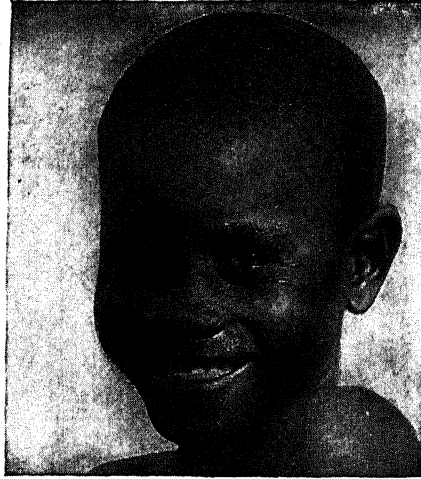
## THE CRADLE OF THE NEW WORLD

culture very different from the peasant life around them. France still dominates the life of the educated classes intellectually if not politically, but the heritage of the country folk is wholly African.

The Haitians of the interior are a lazy happy people, who delight in the dreamy life. The tropical sun saps their energy, and for food there is always an abundance of fruit, while rice and red Congo beans can be grown with little trouble. Many are too poor to buy much else in the way of food, and such a diet often produces under-nourishment, which is one reason why many suffer from chronic hookworm and malaria. The Department of Sanitation conducts clinics in the hill-country and gradually the peasants are gaining confidence in scientific methods, which are to them very new and mysterious.

Yet life in the little thatched huts is not miserable or doleful. For all their poverty and ignorance the peasants are self-respecting; they possess a certain dignity, and have the fortunate gift of laughter. Cock fighting is their great sport, and every man has his favorite birds. On Sunday excited crowds gather to watch one contest after another, and the crowing of the cocks echoes from hamlet to hamlet. A very popular amusement is the Congo dance, as primitive now as when it came from the African jungle. Every Saturday night the low, compelling throb of goatskin drums sounds throughout Haiti, with a subtle and irresistible potency. Innately graceful, the dancers abandon themselves to that weird music, and achieve a marvelous bodily rhythm.

Another African inheritance is the religious cult of Voodoo, which the peasants retain and mingle with their Christianity. The primitive Africans believed that gods and spirits inhabited animals and natural forces, or natural objects like stones and trees. One of the greatest spirits, Damballah, was incarnate in the green serpent, which was especially respected. Legba was god of the crossroads, and there were many others. Spirits must not be angered—they must be placated—and so an elaborate ritual involving chants, prayers and sacrifices



© E. N. A.

### YOUNG HAITI'S SMILE

Children in Haiti lead a lazy, happy life, often not bothering with clothes until nearly half-grown. This youngster's disposition is as sunny as the country itself.

grew up in connection with the worship of Voodoo gods, who had their temples and their priests. The latter were called "papalois," and the priestesses were known as "mamalois." Sometimes these men and women increased their influence by means of sorcery, and sold the people charms of various kinds. But primarily Voodoo was, and is, a religion, not a black art. To-day in Haiti, Voodoo temples and rites are forbidden, and the use of the great Rada drum which summoned the worshipers is illegal. Yet the old beliefs linger on among the peasantry, and are but gradually superseded by modern ideas.

Santo Domingo never had so many slaves as Haiti, and under Spanish rule it was easy for a slave to buy his freedom. But in 1795, and again in 1822 when Haiti ruled the whole island, many of the white inhabitants emigrated to Cuba or Porto Rico; so most Dominicans to-day are mulatto, a combination of the Spanish and Negro races, with a strain of Indian blood. There are some pure-blooded Negroes and a few pure-blooded whites, including foreigners. Turkish and Syrian traders carry on much of the business in

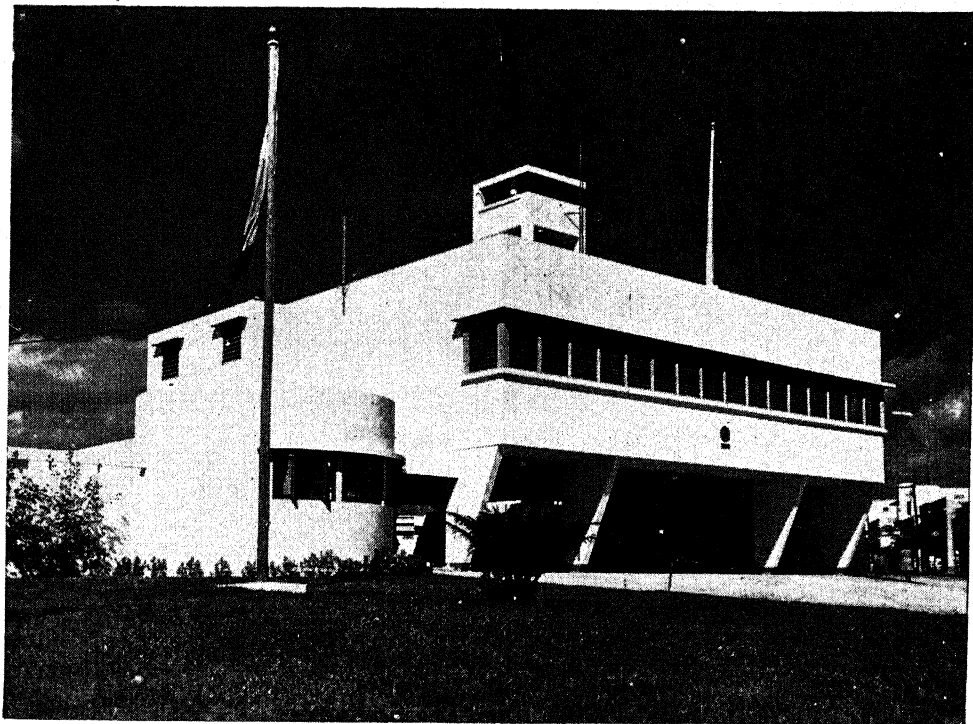


BLACK STAR

#### A SHOPKEEPER IN CUIDAD TRUJILLO WHO MAKES HER OWN WARES

Hundreds of bags and baskets are for sale, all made by the clever hands of the vendor. Though she works long hours and her earnings are scant, she is proud of being able to support herself.





INFORMATION CENTER, DOMINICAN REPUBLIC

### MODERN ARCHITECTURE IN THE NEW WORLD'S OLDEST CITY

The firehouse in Ciudad Trujillo, Dominican Republic, is very modern in design and houses the latest motorized fire-fighting equipment, including a hook-and-ladder truck. Many of the city's new and ultramodern buildings form a sharp contrast with the ancient edifices built by the Spaniards from the fifteenth to the eighteenth centuries.

the larger towns. For its size and fertility the Dominican Republic is sparsely populated. Occupying nearly two-thirds of the whole island, it yet has less than half as many people as Haiti. The language and the atmosphere of the country are Spanish. Dominican writers—especially the poets—have made notable contributions to Spanish-American literature. Its culture is far ahead of its political and material development.

Like Haiti, Santo Domingo has seen a long series of revolutions, presidents and dictators. Since 1795 it has been a French colony, a Spanish colony, a part of Haiti, an independent republic, again a Spanish colony, a republic, and finally a virtual protectorate of the United States. To-day it is once more a republic, but until 1940 its custom receipts were handled by an American official.

Such a troubled history explains why

Santo Domingo has not developed its resources to a greater extent. Its future lies in its agricultural possibilities. There is no land in the West Indies with more fertile soil, richer vegetation or more favorable climate. Here the first sugarcane in the West Indies was planted, and sugar is still the chief crop. Since, however, modern sugar plantations require a large amount of capital, most of them are now owned by foreigners. The best sugar lands are in the southern part of the republic, around San Pedro de Macoris.

Farther north, beyond the central mountain range which divides the country, cacao is the principal crop. Cacao, from which we get cocoa and chocolate, is a very good investment for small farmers. The trees require little attention and while they are growing to maturity other crops may be planted between the rows. Tobacco and coffee are also grown ex-

## THE CRADLE OF THE NEW WORLD

tensively in the northern provinces, and there are fine grazing grounds.

This northern district is a very beautiful part of the republic. It is diagonally crossed by the valley of the Cibao, extending from the Atlantic coast to the Bay of Samaná. The great bay forms the largest and finest harbor in the whole archipelago. It is thirty-five miles long and ten or fifteen miles wide, with a single narrow entrance channel. The buccaneers knew its shores well and fortified Trade Wind Cay, a little island near the entrance. Entrenched behind strong walls, and supplied with water from deep cisterns, they defied every authority in the West Indies. Samaná's commercial possibilities are enormous. At its upper end the railroad begins, and the lands along the shore are ideal for plantations of tropical fruit.

Historical interest centers in the city of Santo Domingo. Today the capital of a tiny republic, it was once the center of Spanish power in the New World. The great explorers—Balboa, Pizarro, Ojeda,

Cortés, Ponce de León—came first to Santo Domingo before starting on their famous journeys of conquest. The Columbus family one and all were closely connected with the city. Bartholomew Columbus founded it in 1496, at the mouth of the Ozama River on the south coast. In 1502 a hurricane demolished the new little houses, which were rebuilt on the opposite bank. When Diego Columbus was governor he built a great palace. In 1936 the President renamed the city Ciudad Trujillo in honor of himself.

The most ancient building in the city is the citadel within the fort of La Fuerza. This tower is the very oldest existing structure built by white men in the New World, having been finished by 1504. The Cathedral dates from 1514. The body of Columbus was brought here after his death in Spain, for he had wished to be buried in Santo Domingo, and some believe that it was not taken to Havana in 1795, but still rests in the island which he thought the loveliest of the West Indies.



BLACK STAR

### CIUDAD TRUJILLO FROM ACROSS THE LITTLE OZAMA RIVER

The city is on the right bank of the stream, which can take only small craft. On Ciudad Trujillo's ocean front, however, there is a deep-channeled artificial harbor with modern docks.



Ewing Galloway

**IN THE TROPICS ALMOST ANYTHING WILL DO FOR BUILDING MATERIAL**  
This hut in the backwoods of the Dominican Republic is built almost entirely of banana leaves. It looks as though a touch would knock it over, but the big leaves are tough in fibre and serve at least to keep out tropical downpours. These peasants are but little affected by the modern life of the capital and other cities.

#### **HAITI AND THE DOMINICAN REPUBLIC: FACTS AND FIGURES**

The island of Hispaniola is second largest in the West Indies, 400 miles long and from 24 to 165 wide; it lies between Cuba and Puerto Rico, with the Bahamas north and the Caribbean south. The western part (about one-third) is occupied by the Republic of Haiti and the remainder by the Dominican Republic.

##### **HAITI (*République d'Haïti*)**

Area, 10,714 sq. mi.; population, 3,111,973. In 1934 United States, having occupied Haiti since 1915, withdrew. The fiscal representative was withdrawn in 1941. Under the constitution adopted in 1946 the president is elected by the National Assembly for 6 years. Deputies to the Chamber are elected for 4 years by popular vote; senators for 6 years by electoral colleges in each department. Women cannot vote but those over 30 years of age are entitled to hold public office. Catholicism the dominant religion; freedom granted to other faiths; Catholic clergy mostly Bretons and French Canadians. Elementary education free and nominally compulsory; 87,000 pupils enrolled in 1,060 primary schools, besides higher schools.

Haiti is agricultural, growing coffee, cacao, sugar, bananas, cotton, sisal; exports coffee (43% of total export value), sisal fiber, sugar and molasses, bananas, cotton, cacao, hides, castor beans, mahogany ware, logwood. Imports: wheat flour and other foodstuffs, cotton goods, soap, silk, iron and steel, machinery and parts. Manufactures include sugar, textile and

cottonseed-oil plants. There are 158 miles of railway (all privately owned); 1,500 miles of telegraph lines; 1,200 miles of telephone wire. Highway mileage, 975. Chief towns are capital, Port-au-Prince, 424,168; Aux Cayes, 195,539; Gonaïves, 165,635; Cap Haïtien, 119,039; and Port de Paix, 115,850.

##### **DOMINICAN REPUBLIC (*República Dominicana*)**

Area is 19,128 square miles; the population 2,121,083. Under the Constitution of 1947, the Congress consists of 2 houses elected for 5 years by direct popular vote; the President and 18 ministers make up the Cabinet. Women have been given the franchise. The American official who supervised finance, including customs, was withdrawn in 1938. Catholicism the state religion; other denominations tolerated. Education free and compulsory; school attendance (at all levels), 242,500.

Agriculture and stock-raising are the chief industries. Sugar, cacao, molasses, corn, rice and tobacco are the principal products. Major manufactures include rum, alcohol, furniture, textiles and shoes. Forest products include lignum vitae and mahogany; some gold is mined. Railway mileage, 168, besides 637 miles on big estates. Highway mileage, 2,250, and is being increased. Nearly 5,000 miles of telegraph and telephone wire. Largest towns: Ciudad Trujillo, capital, 181,583; Santiago de los Caballeros, 56,192; San Pedro de Macoris, 24,200; San Francisco de Macoris, 18,108; Puerto Plata, 17,059.



### A LAND OF PROMISE—THE CONTINENT OF SOUTH AMERICA

South America presents certain striking similarities with the great continent that lies to the north. Both Americas have, roughly, the form of a triangle; both taper rather sharply from north to south. Both have lofty ranges of mountains along the western coast and smaller mountain ranges in the east; both have a great central plain or "depression." The great difference between the continents is that most of South America lies within the tropics.

# THE LANDS OF EL DORADO

## *Riches of Venezuela and the Three Guianas*

No part of the world is more fascinating than the great continent of South America. Stretching from the tropical Caribbean Sea almost to the Antarctic Ocean, rising from swamps below sea level to towering peaks 23,000 feet high, it boasts an unequalled variety of surface and climate. Originally peopled by many different Indian races, it was conquered and settled by Spain and Portugal in the sixteenth century. Three hundred years later the Latin-American colonies became independent, and now ten republics, large and small, occupy most of the vast territory. In this chapter we shall learn something of Venezuela, the northernmost republic, and of the three remaining European colonies, British, French and Dutch Guiana.

IN the days of long ago, when bold adventurers sailed out upon the seas to plunder Spanish galleons laden with treasure from South America, there were stories about a city with roofs of gold in the region east of the Orinoco River. These legends, implicitly believed by all Europe, fired the imaginations of men and sent them to search for this fabulous El Dorado, "the golden land," and its phantom city of Manoa. The seekers did not find the city of gold. They discovered instead a land of golden possibilities, which even to-day await the adventurous. The whole vast, mysterious country north of the equator and east of the Andes is after all so rich in timber, gold, diamonds, foodstuffs and oil that it is still regarded as a genuine El Dorado.

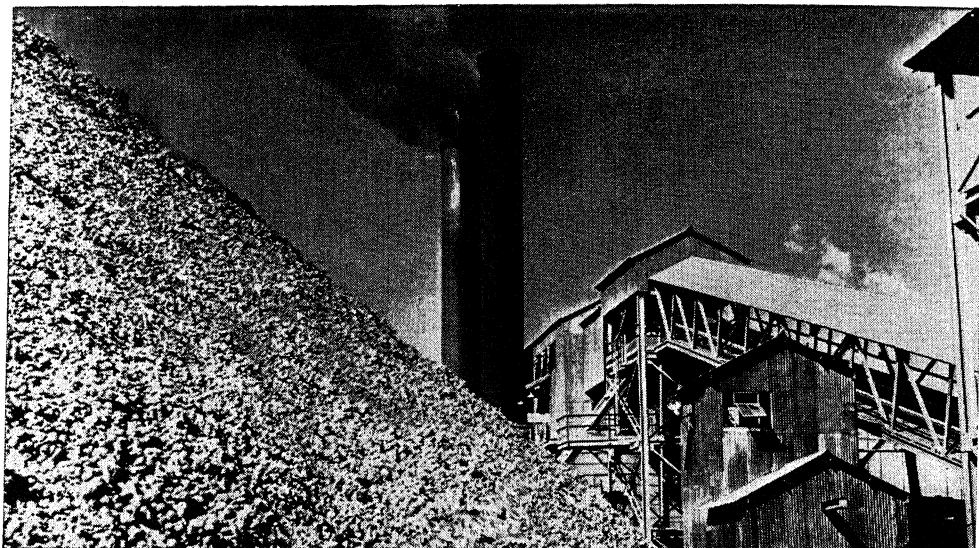
The great tropical region between the Orinoco and the Amazon is known as Guiana. Part of it belongs to Brazil and is described with that country; the rest is divided between Venezuela and the three colonies of British, French and Dutch Guiana. The "three Guianas" are the only European colonies left in South America. England, France and Holland fought with each other for control of the territory, and now each has a share. All three colonies are much alike in physical features. The seacoast is a belt of mud from eighteen to fifty miles wide, formed by many rivers and frequently flooded during the rainy season, so that dikes and drainage systems are necessary to protect the sugar plantations. From behind this alluvial plain the turbulent rivers pour down through a land covered for the most

part with dense tropical forest. Snakes and alligators are dangerously plentiful; jaguars, armadillos, poisonous ants, scorpions and countless other insects inhabit the jungle; monkeys and parrots chatter in the high tree-tops. Gorgeous orchids and rich ferns fringe the tortuous streams, where beautiful rose-colored flamingoes make a vivid picture against the green growth of the banks.

As the land rises ever higher toward the mountains of the south, the forest gives place to "savannahs," rolling plains where the grasses sometimes stand man-high. This is ideal cattle country, with only one disadvantage—the difficulty of reaching it, for there are no railroads except along the coast. The rivers are the highways and they are so impeded by rapids and waterfalls that steamers cannot go very far inland. Only small boats such as the Indian dugout canoes can be used on the upper stretches. Still farther back from the coast, mountain ranges divide the Orinoco watershed from that of the Amazon, and this impenetrable jungle-covered wilderness has never been well explored. The highest peak is Mount Roraima, on the Venezuelan frontier, a great reddish cliff which rises straight up out of the green jungle.

In little forest clearings beside the rivers, or higher up on the wide savannahs, dwell the native Indians, leading lives as simple and uncivilized as those of their ancestors. They wear little clothing—pieces of cloth, feathers and bead ornaments suffice. The men are the hunters. The women cook, cultivate the





NETHERLANDS INFORMATION BUREAU

### BAUXITE PILES UP AT A SURINAM PLANT

Bauxite, the ore from which we get aluminum, is the mainstay of Surinam. Together with its neighbor, British Guiana, Surinam furnishes nearly half of the world's bauxite supply.

cassava patch, and gather firewood. Cassava roots, from which we get tapioca, are grated and crushed to extract the poison they contain, and are then made into flat cakes, cooked on a griddle and eaten as bread.

The population of the colonies is mixed. For instance, on the streets of Georgetown, the capital of British Guiana, we should meet a few white people, mainly English and Portuguese, and a host of colored folk. There are Negroes, descendants of the slaves who used to work the sugar plantations, slant-eyed Chinese, Syrians, slim laborers from far-distant India and Java, and perhaps one or two silent, copper-colored aborigines. Georgetown is at the mouth of the Demerara River, below sea level, and so is protected by a sea wall which serves as a promenade, while some of the streets have drainage trenches down the side or middle. Many of its wooden houses are built on piles as a precaution against floods.

Dutch Guiana, or, as it is often called, Surinam, is east of British Guiana. Its capital, Paramaribo, with not a very Dutch-sounding name, is, nevertheless, quite like a Holland town in appearance.

With its crisscross of canals and neat arrangement of tree-lined streets, it belies its nearness to the tropical jungle.

Further east along the Caribbean is Cayenne, capital of French Guiana. Cayenne, on an island at the mouth of a river, both also with the name Cayenne, is less than 30 miles from the former ill-famed prison settlement, Devil's Island. All French Guiana was a penal colony until 1946, when it was made an overseas department of the French Republic.

Sugar, cotton, coffee, cacao, rice, corn, plantains, coconuts and bananas all flourish in the moist heat. The forests contain untold wealth in the form of valuable timber trees. There is also the balata tree, whose milky sap dries and forms a rubber-like substance used in making belting for machinery. Gold, the metal which led to the settlement of Guiana, is found in many places, but mining is expensive. During the search for gold, diamonds were discovered in the sands of the Mazaruni River of British Guiana. The diamonds are still mined and exported, and, though small, most are of fine quality.

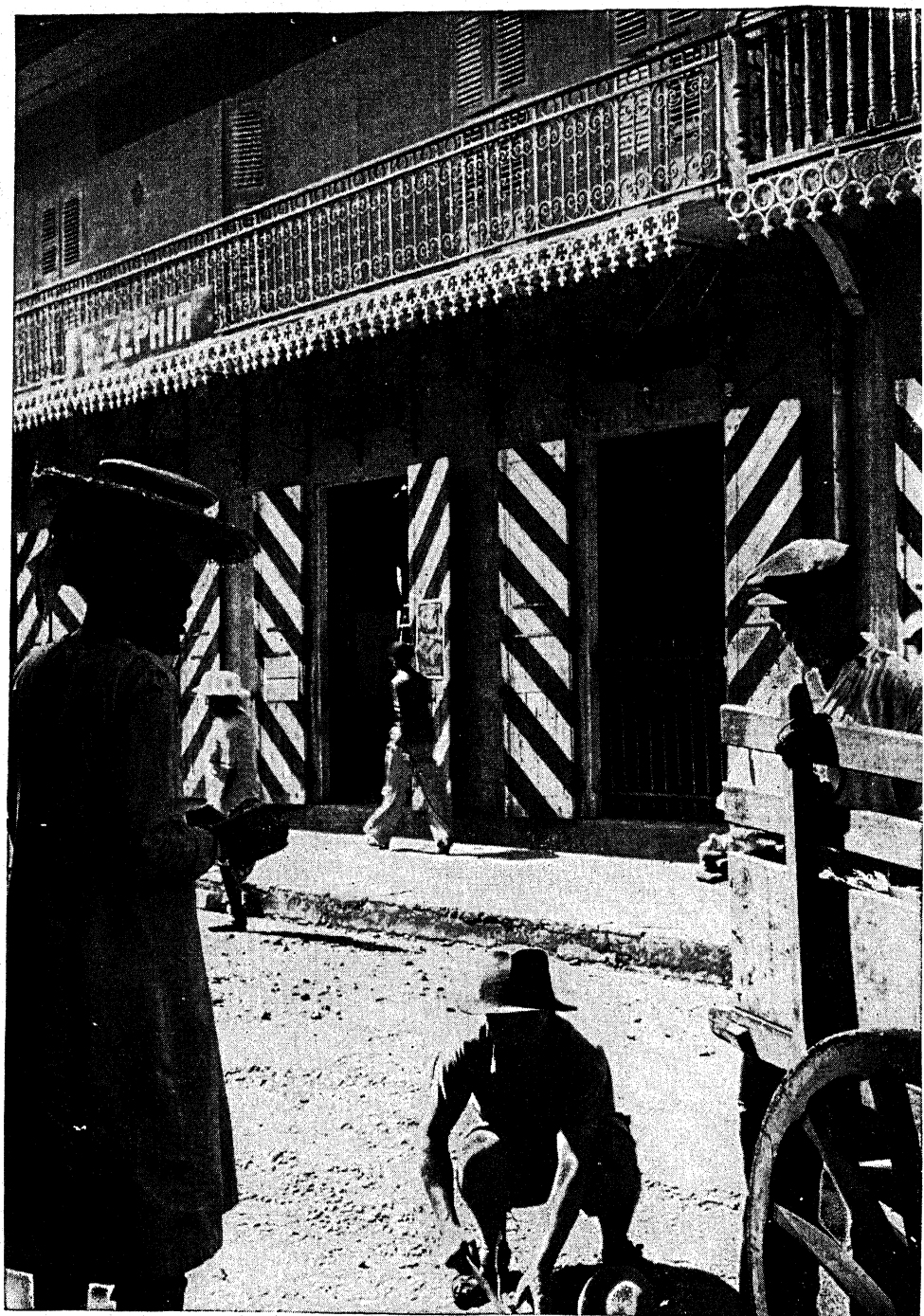
Across the border in Venezuela, the greatest source of wealth is oil. Venezuela is larger than all the Guianas combined.



NETHERLANDS INFORMATION BUREAU

### THE THROB OF AFRICAN DRUMS SOUNDS IN THE SURINAM FOREST

The drums are like those that the ancestors of these Bush Negroes brought from Africa generations ago. Bush Negroes, or Djukas, inhabit remote areas and follow an Indian way of life.



Three Lions

#### ORNAMENTAL BALCONIES ABOVE AN OLD STREET IN CAYENNE

Wherever the French settled in the warmer parts of the New World, they adorned their homes with fragile-looking little balconies in ironwork. Cayenne is on the narrow Guiana coast, nearly always hot and humid; and most houses have shutters that may be barred against the glaring sun. In newer parts of the city there are broad macadamized avenues.



PHILIP HANSON HISS

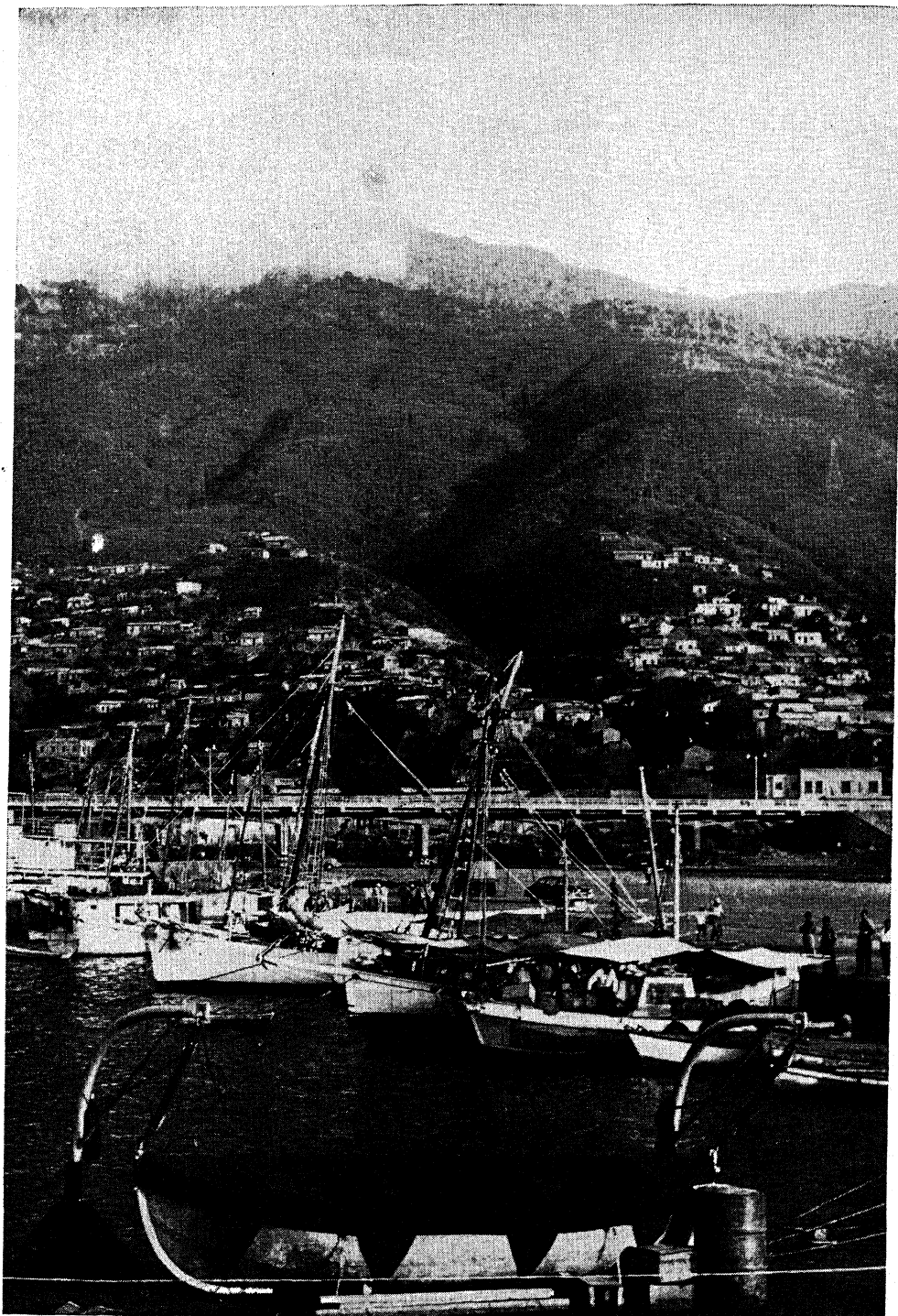
#### HOUSES ON GRAVENSTREET SHUTTERED AGAINST BLAZING SUN

The pleasant, tree-bordered streets of Paramaribo, the capital of Surinam, are surfaced with tiny sea shells on which the footsteps of pedestrians resound with a slightly crunching noise.

bined, large enough to contain oil lands, cattle country, gold country, timber forests and many kinds of farming land. The great Orinoco River divides it almost in two, forming a large valley right through the middle of the country from west to east. The river brings down so much silt and mud that through the ages it has built up a delta covering forty thousand square miles, across which the water now finds its way in many separate streams. South of it are tropical highlands similar to the Guiana mountains—forest-covered hills cut by rivers which reach back toward Brazil. North and west of the Orinoco are wide grassy plains similar to the savannahs of Guiana, but known in Venezuela as “llanos,” where feed herds of cattle, antelope and peccaries (peccaries are wild animals resembling small pigs). The llanos do not extend clear to the Caribbean; between them and the sea rises a mountain wall which is the last low part of the mighty Andes range. To the westward rises the Cordillera de Mérida, looking high enough to suit our idea of what the Andes should be, and from that point on, Venezuela is

mountainous. Only on the low, swampy shores of Lake Maracaibo is it evident once again that we are in the tropics. The lake water is fresh, though it connects with the Caribbean by a narrow inlet through which the Spaniard Alonzo de Ojeda sailed his little vessels in the year 1499. He saw the huts of the lake Indians built on stilts above the water, and was reminded of Venice, the city built upon the sea. So he called the place Venezuela—“Little Venice”—and the name was applied to the whole country.

The Spanish settlers were constantly forced to fight off buccaneers and privateers of many nationalities in the days when the Caribbean was the bloody rendezvous of all adventurers. Cumaná is the oldest Spanish settlement in South America. It was founded in 1523. All the old Venezuelan cities are along the coast. There are three main ports—Maracaibo, Puerto Cabello and La Guaira. Caracas, the capital, lies three thousand feet high in the coastal mountains, which make a background for its luxuriant gardens and red-roofed houses. Caracas is quite ancient, as cities in America go,



HAMILTON WRIGHT

**THE MOUNTAINS** march down to the harbor at La Guaira, Venezuela's port on the Caribbean. Pink, blue and yellow houses with red tile roofs decorate the green slopes.



## THE LANDS OF EL DORADO

but thanks to earthquakes and wars most of its buildings are less than a century old. Consequently its narrow straight streets have modern paving and lighting, and its automobiles, electric car lines and telephones do not seem new and incongruous alongside the fine public buildings. The low adobe walls of the dwelling-houses are painted in soft yet bright colors, and green shrubbery grows in every patio. There are beautiful parks and squares such as the Plaza de Bolívar, dedicated to the great hero of the war for independence.

Simón Bolívar was born in Caracas, and he did so much to overthrow Spanish rule in South America that he is called the Liberator. Bolívar was a man of great courage and forcefulness, with ambitious ideas for reorganizing the country. He defeated the royalists in Venezuela, Colombia and Ecuador, uniting those three states for a time. Then he marched south and routed the royalist armies in Perú and what is now Bolivia. His plans for making one great nation of North-western South America proved unpopular,

and he died in exile, but his brilliant services to the cause of independence are fervently remembered by every Latin-American, and Venezuelans are very proud to be his countrymen.

At the time of his victories, Bolívar was all-powerful but after he was exiled and Venezuela became a separate republic (1830), no one seemed able to govern the country. Revolution followed revolution until 1870. After that, several dictators gained control, with Juan Vicente Gomez holding power for the longest period of time. From 1908 to 1935, Gomez headed the government three times. In 1947 a democratic constitution was adopted, and Romulo Gallegos was installed as president in 1948. The constitution did not prove strong enough to maintain a stable government. A series of revolutions, bloodless and otherwise, swept the country in the following years, ending in the proposal of a new constitution.

West of Caracas the country is given over to agriculture of many kinds. In the low valleys are sugar plantations, tobacco fields, groves of oranges and coconut

**SIMON BOLIVAR**, known as the Liberator of South America, still lives in the hearts of his Venezuelan countrymen. The spirited equestrian statue of him is in Caracas.

HAMILTON WRIGHT



## THE LANDS OF EL DORADO

palms. Higher up cacao and coffee supply the export trade. Venezuelan coffee is of excellent quality and forms the country's principal agricultural export. Cacao ranks second as a money crop. Corn and cotton are raised and used almost exclusively to help feed and clothe the five million people making up Venezuela's population. Farther west, around the proud old cities of Valencia and Barquisimeto, there are stock farms, which supply the packing houses at Puerto Cabello. From early colonial times, the cattle industry has been important in Venezuela.

### *Venezuela's Liquid Wealth*

Across the mountains, around Lake Maracaibo, the character of the country undergoes a complete change. This tropical lowland section, although fever-infested and generally unhealthy, contains fabulously rich deposits of petroleum and gives Venezuela its rank as the world's second largest producer of oil. The volume of petroleum obtained has increased astoundingly in a few decades. Beginning in 1917 with only 119,000 barrels, production in a recent year had climbed to the huge figure of 546,770,000 barrels. Thus a vast source of income was tapped in a country that once had difficulty in meeting its obligations. What is more, so far as can be judged, production has not yet reached the maximum. About 90 per cent of Venezuela's petroleum production is exported in crude form because there are still too few refineries within the country to handle more than local needs. However, a number of large and modern refineries are now in construction. Most of the crude oil exported goes to the Dutch islands of Aruba and Curaçao, a short distance from the Venezuelan coast, where there are large refinery facilities.

### *Paving Material from a Lake*

Petroleum and asphalt deposits reappear in different parts of Venezuela. Lake Bermudez, near Cumana, is an asphalt lake much larger than the famous pitch lake of near-by Trinidad. One of the world's chief sources of asphalt, Lake

Bermudez contains one thousand acres of the sticky stuff so widely used in paving our streets and roads, in roofing our buildings and for manufacturing insulating and waterproofing materials.

### *Pearls and Diamonds*

A very different product comes from Margarita Island, just off the coast at Cumana. Divers there bring up many thousand dollars' worth of pearls each year. Other gems, such as diamonds and emeralds, may be found in the wild country south of the Orinoco. Most of Venezuela's diamond output is put to industrial use. This vast Orinoco region is rich in gold, which has been mined there since the early days when Venezuela was still a Spanish colony. It still remains a fairly important export.

Venezuelan iron deposits have been known to exist for a long time, but it is only recently that they have begun to be exploited. Deposits of asbestos, coal, chromite, tin, manganese, mercury and lead exist but have not been fully exploited. In 1941 a port, Puerto de Hierro, was begun to take care of transshipping the iron ore.

### *Untapped Jungle Resources*

The area south of the Orinoco is rich in commodities other than minerals. Ciudad Bolivar, on the Orinoco River, is the base from which lumbermen start out to collect the products of Venezuela's almost untapped forests. The rubber gatherers get supplies there in March and April, and set out for the jungle before the rainy season begins. At the end of the season they bring in not only rubber but balata and some chicle. Because transportation facilities are still very poor or are lacking altogether, a great deal of Venezuela's forest wealth is still barely touched. There are many rare and valuable woods and a vast supply of medicinal plants to be tapped.

Back in the partly unexplored wilderness land bordering on Guiana and Brazil are many Indians leading a primitive life like that of the Guiana tribes. But the real Venezuelan, the man of the llanos or



GRACE LINE

### LATIN AMERICA'S LITTLE VENICE

This Indian village near El Mojan on Lake Maracaibo is built on stilts. It is typical of the villages that made the sixteenth-century discoverers call the country Venezuela, or "Little Venice." Maracaibo, an important port, is the headquarters of the great petroleum industry that is located around Lake Maracaibo, where the oil fields are among the richest in the world.

the coast mountains, has both Indian and Spanish blood in his veins. Negroes were imported in colonial days to work the sugar plantations, and they have remained an important element in the population. There are a few old families which trace their descent exclusively from the Spanish conquerors, and make up the nucleus of the educated, cultured class of Caracas, Valencia and the other cities. From this group come lawyers, doctors, politicians, writers and scholars. Two universities—that of Los Andes at Mérida, and the Central University at Caracas—offer advanced studies of all kinds. The majority

of Venezuelan children do not continue in school beyond the age of fourteen, which is the limit for compulsory attendance. Venezuela needs not only more schools but more people. The Technical Institute of Immigration and Colonization is arranging for displaced persons from Europe to come to Venezuela, and by 1947 some 15,000 of them had already settled there. It will take many immigrants and much hard work to develop the rich and varied territory and to release the national wealth that facilitates not only economic improvement but intellectual development as well.



Courtesy Gulf Oil Co.

#### DOCK IN PUERTO LA CRUZ IN VENEZUELA

Here we see a large American tanker loading up with oil. Ships of all nations call here for the petroleum which is one of Venezuela's chief products. When this ship is fully loaded, the water will come up to the dark line around the hull. During World War II, this oil became even more important with the loss of the oil-rich East Indies to Japan.

#### VENEZUELA AND THE GUIANAS: FACTS AND FIGURES

##### VENEZUELA (*Estados Unidos de Venezuela*)

Bounded north by the Caribbean, west and south by Colombia, south by Brazil, east by British Guiana. Area, 352,143 square miles; population is 4,985,716. Bicameral Congress elected for 4 years; president also elected by the people for 5 years. Religion is Catholicism; others tolerated. Education is free and compulsory under 14 years of age: 491,799 pupils in all schools; 4 universities.

Crops: coffee, cacao, sugar, cotton, rice, sisal, tobacco, corn, beans. Livestock estimated at 7,000,000 head. Forest products: balata, divi-divi, medicinal plants, hardwoods. Minerals: world's second largest producer of petroleum, also gold, diamonds, coal, iron. Exports: petroleum, coffee, cacao, gold. Imports: machinery and apparatus, metals, foodstuffs and beverages, textiles, chemicals, minerals (glass and ceramics), paper. Railway mileage, about 650; highways, about 6,000 mi.; waterways, about 12,000 mi. Chief towns, Caracas, capital, 487,903; Maracaibo, 232,488; Barquisimeto, 105,080.

##### BRITISH GUIANA (*British Colony*)

Bounded north by the Atlantic, west by Venezuela and Brazil, south by Brazil, east by Dutch

Guiana. Area, 83,000 sq. mi.; population is 425,156; East Indians 44%. Capital, Georgetown, 84,794. Administration: governor, Executive Council, Legislative Council. Products: sugar, rice, coconuts, cacao, rubber, gold, diamonds, bauxite, charcoal, timber (greenheart, wallaba, mora), rum.

##### DUTCH GUIANA (*Surinam, Dutch Colony*)

Bounded north by the Atlantic, west by British Guiana, south by Brazil, east by French Guiana. Area, 54,291; population is 221,000. Capital, Paramaribo, 80,000. Administration: governor, Executive and Legislative councils, the latter consisting of 21 elected members. Products: bauxite, rice, balata, hardwoods, gold, coffee, coconuts and citrus fruits.

##### FRENCH GUIANA (*French Overseas Department*)

Bounded north by the Atlantic, west by Dutch Guiana, south and east by Brazil. Area about 34,740 sq. mi.; population, 29,000, excluding troops, officials and Indians. Seat of government, Cayenne, 11,700. Administration: prefect, elected Council General of 16 members; is represented in France. Products: gold, rice, maize, manioc, cocoa, bananas and timber.

# IN THE ANDES

## *Two Countries of the Mighty Mountain Range*

If one enters the great continent of South America by way of Colombia it does not seem very different from the Caribbean lands along the way. But in Colombia different climates meet; the heat of the low tropical shoreline gives way to the cold of the high Andes. The farther south along the Pacific one goes, the more mountainous the coast becomes, and Ecuador, which is next to Colombia, seems to be nothing but mountains, with scenery past description. Both Ecuador and Colombia have fine old capitals built thousands of feet high in the hills, where Indian cities flourished before the Spaniards came, and both are rich in the products of lowland as well as highland.

WHEN the Spanish explorers of Colombia set out early in the sixteenth century from their settlements on the Caribbean Sea to search for gold, they found that, in addition to swamps, forests and dangerous rivers, they were confronted by lofty mountains into which their Indian enemies always vanished. When the adventurers followed into the mountain fastnesses, they found that there was always another mountain beyond. Had they continued to march on for years they would still have found "another mountain beyond," for they were on the Andes, that mighty mountain system which runs for five thousand miles along the whole western margin of South America.

Beginning at Cape Horn in the south with a single moderately high range, the Andes grow higher and wider as they stretch northward; in fact, they consist for a great part of their length of two and three parallel ranges, or Cordilleras, separated by river valleys. It is among these snowy giants that the Amazon and a host of lesser rivers have their beginnings. This magnificent mass of mountains contains the highest volcanoes and some of the highest peaks in the world. Within its limits can be found an infinite variety of climate and scenery. There are high plateaus, some of which are very fertile, while above are mountain slopes where the grass barely suffices for scattered flocks of sheep. One can mount even higher, till no living thing is seen but the great condor, that majestic bird of the lonely heights where vegetation

ceases, and the great peaks, even at the equator, are wrapped in eternal snow.

The Colombian Andes consist of three Cordilleras parallel to the coast—the Eastern, Central and Western. Between the last two is the beautiful valley of the Cauca River; between the first two, through almost the entire length of the country, the River Magdalena flows north to the Caribbean Sea. In spite of shoals and swift current, this waterway is the main route into the interior.

East of the mountains, grass-covered plains—the llanos—stretch away toward Venezuela and the Orinoco River, and large rivers flow down through unexplored jungle country to join the mighty Amazon. On the vast llanos there are two seasons, one wet and one dry; the Amazon basin has torrents of rain most of the time and always it is hot—often over 100°. The coastal plains, on each side of the Isthmus of Panamá, are low and hot. Colombia is lucky to have territory on both the Caribbean and the Pacific.

From Barranquilla on the Caribbean one may fly to Bogotá, the capital, in a few hours; but by making the long journey up the Magdalena River by steamer one will realize more forcibly the contrast between the coast and the interior of Colombia. The shallow, muddy river is full of alligators, and lined with mosquito-infested jungle or plantations of bananas and sugar-cane. At Girardot the railroad begins its difficult climb over the mountains; by the end of the trip the temperature is 55° instead of 90°,

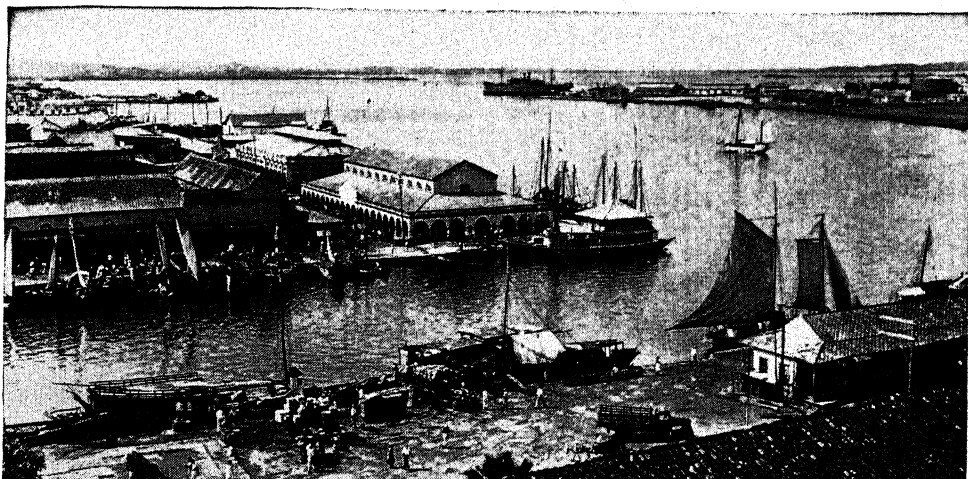




STANDARD OIL CO. (N. J.)

#### CULTIVATING A GARDEN PATCH OF YUCCA AND PLATANO IN COLOMBIA

The two plants are basic food items in the diet of Colombians and grow in the low, warm regions of the country. The platano is very similar to the banana but is cooked before eating.



STANDARD OIL CO. (N. J.)

### CARTAGENA WAS ONCE A SPANISH STRONGHOLD ON THE CARIBBEAN

Cartagena was founded in 1533, before the interior of Colombia had been explored. Some of the old fortifications are still standing, and in spite of the fact that some of the walls are forty feet thick, this rich city was sacked three times by pirates. Cartagena is hot and sunny, with narrow streets separating low houses painted in blue, vermilion or green.

and snow-capped peaks are everywhere visible, for Bogotá is eighty-six hundred feet high in the Eastern Cordillera. Instead of white cotton suits, the workmen of the plateau wear dark trousers and a warm wool ruana, which is a square blanket slit in the middle to go over the head. Men and women alike wear "Panamá" hats, and rope sandals called *alpargatas*. Surrounded by highly cultivated land and having a healthy climate, Bogotá is, as befits a capital, the heart of the intellectual life of the country. In spite of trolley cars, electric lights, telephones and other luxuries of modern life, there is about this charming city a certain air of aristocratic aloofness.

Jiménez de Quesada conquered the interior of Colombia about 1536. In those days it was called New Granada. Upon gaining independence from Spain in 1819, with Bolívar's help, the country was for a time joined to Ecuador and Venezuela, but that arrangement did not last and Colombia, after many stormy years, adopted its present name and constitution. In 1903 the valuable Isthmus of Panamá was lost through revolution. Colombia recognized Panamá's independence in 1914 and established diplomatic relations in 1924.

Most of the people of Colombia live in

the higher parts of the country, from 4,000 to 9,000 feet above the level of the sea. The temperature in the coastal regions, along the Caribbean, is too high for comfortable living the year round.

Today in Colombia one is less conscious of the past than of the future, although signs of the country's long and fascinating history can be seen on every hand. Colombia's amazingly rich resources are as yet hardly tapped. New irrigation projects are turning unproductive land into the richest kind of farming soil. The cotton, sesame and rice grown on this land will supplement the already rich harvest of the country. Colombia ranks second as a producer of coffee and first in the production of mild coffee. The cultivation of rubber—rubber trees grow wild in Colombia—is a comparatively new industry. New industries and factories are springing up in the cities and towns.

The problem of building motor highways and railroads is a difficult one in such a mountainous country, but construction has proceeded steadily.

Almost all the rivers contain gold, and platinum is an important export. Coal and other minerals are plentiful, and oil gushes from Colombian wells at the rate of many millions of barrels a year.

## IN THE ANDES

The finest emeralds in the world come from the Muzo mines north of Bogotá. There in the crater of an extinct volcano Indian laborers cut out chunk after chunk of the quartz containing the gems, and other workers carefully break it, washing and searching the fragments so that not one small green crystal is overlooked.

The soil of the valleys and plateaus is very fertile, and a tropical country of such varying altitudes has a bewildering variety of climates, each with a different agricultural product. One may travel from the tropics to the arctic zone simply by climbing a mountain. Bananas and sugar-cane grow along the coast and millions of bananas are shipped from Santa Marta to the North American markets. Cacao grows farther up the Magdalena, and when one gets high enough above the sea one notices everywhere the glossy leaves of the coffee trees. Most of the merchandise sent down over the hill trails on muleback and in ox-cart is coffee—sack

after sack of it. It is a good product for a mountain land because, weighing little, it is easily transported. Colombian coffee is famous for its excellent mild flavor.

Colombia grows not only the customary plants of the tropics—beans, sugar-cane, mangoes, bananas, melons, cassava, plantains, pineapples, papayas, oranges, limes—but foodstuffs of the temperate zone, such as potatoes, wheat and peaches. In addition it boasts fruit and vegetables peculiar to itself. Balú beans come in pods two feet long and grow not on vines but on trees. Arracachas are lumpy-looking root vegetables which taste a bit like parsnips, only better. On the sabana (or plateau) near Bogotá grow blackberries as big as plums. The Cauca River Valley is a veritable garden spot; lying three thousand feet above the sea, and walled in by mountains, it has a climate little short of heavenly. Farther down the Cauca is Antioquía, where flowers and neat farms surround cotton mills and gold



STANDARD OIL CO. (N. J.)

**LA CALERA**, a walled-in Colombian hamlet, lies on a 9,000-foot high, fertile plateau rimmed with mountains of the eastern Cordillera. The center of activity is a cement plant.

## IN THE ANDES

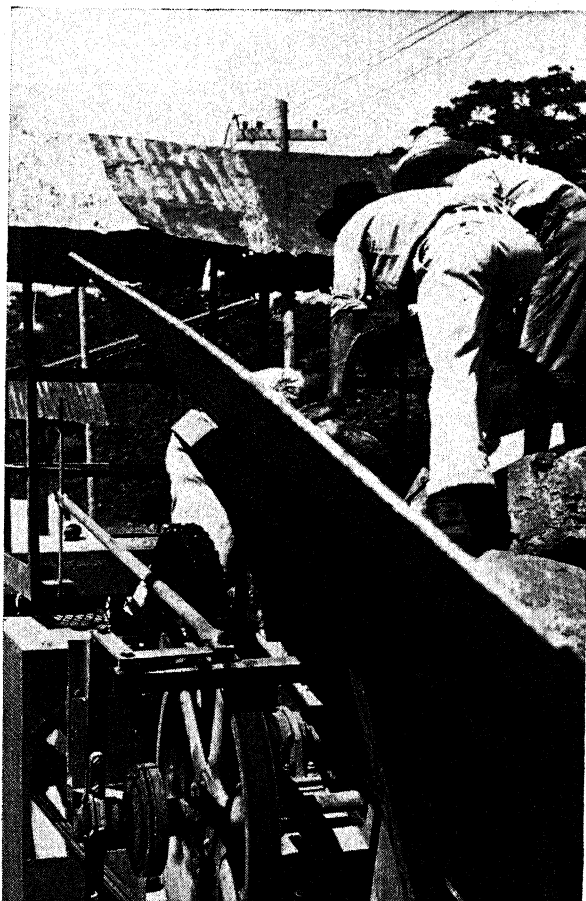
mines, all symbolic of mountainous Colombia's well-nigh inexhaustible possibilities.

As we go down the coast to the neighboring republic of Ecuador, the Andes rise still higher. They have been compared to a ladder, with parallel mountain ranges forming the two sides. The rungs of the ladder are the transverse ridges which cut up the intervening land into high plateaus known as "páramos." Ecuador is a small country but its scenery is on a grand scale. There are thirty-eight volcanoes with an altitude of more than ten thousand feet, and at least ten of these are active. Mount Sangay has a perfectly shaped cone of white snow from which rises a constant cloud of steam. The highest active volcano in the world is Cotopaxi, which measures well over nineteen thousand feet, while the beautiful snowy mass of Chimborazo, now extinct, is taller by yet another thousand. Ecuador is often called the roof of the world, and after one has traveled up over the hills from the Pacific, one feels that the name is decidedly appropriate.

Quito, the capital, lies a thousand feet higher up than Bogotá. Towering above it is Pichincha, the "Boiling Mountain," a volcano which in 1575 covered the city with stones and ashes to a depth of three feet. Quito was already old when the Spaniards took it from the Incas, and the Incas had taken it from a still older people. One mountain in Ecuador, Llanganati, is traditionally supposed to hide vast Inca treasures somewhere in its recesses. The story goes that when Atahualpa, the last ruler of the Incas, was executed by the Spaniards, scores of Indians were hurrying along all the roads leading to Peru, with vessels of gold for the ransom of their king. As soon as his

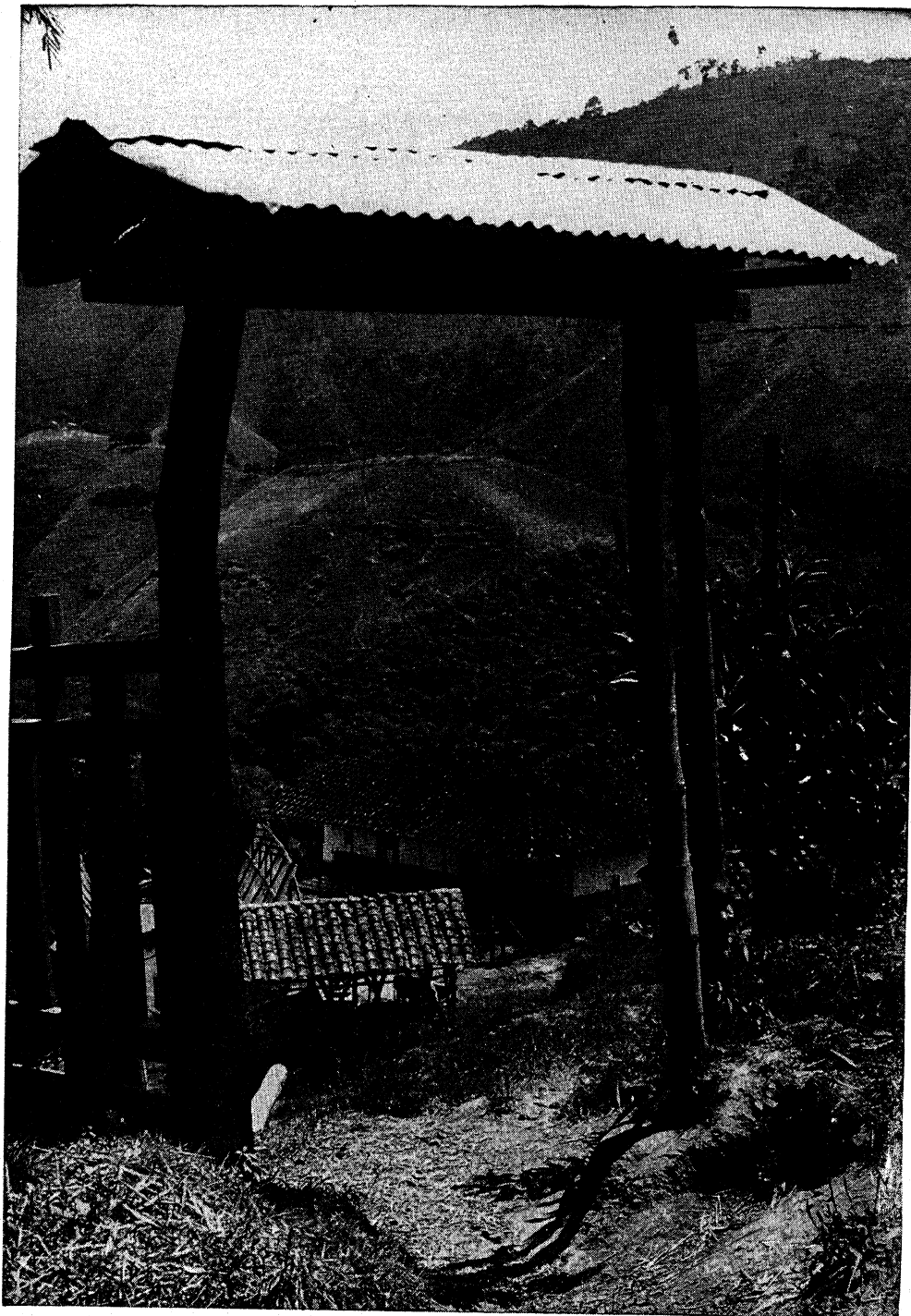
cruel death became known, the word was passed back—"Away from the road"—and the Indians and the gold vanished. Many unsuccessful efforts have been made to locate this hidden treasure.

The peasant people of the Ecuadorian highlands are Cara Indians, either pure or slightly tinged with Spanish blood. One meets them everywhere, the men in bright striped ponchos, or blanket-wraps, the women in thick red or blue shawls which serve to carry babies and burdens. A quiet, hardy people, they cultivate the soil, make baskets and ropes, spin the wool of their flocks and weave it into thick cloth, as their ancestors did centuries ago. They speak their own language even when



UNATIONS

**COLOMBIAN WORKERS** feed rock to a crushing machine. The fragments will be used for roads in the Andes.



STANDARD OIL CO. (N. J.)

# **GARDEN-GATE VIEW OF A COFFEE PLANTATION IN WESTERN COLOMBIA**

Coffee shrubs thrive on the steep hillsides of the central cordillera range of the Andes, near the city of Manizales. Colombia is second only to Brazil in the production of coffee.





GRACE LINE

### YOUNG TRAVELERS ON THE DUSTY ROAD TO RIOBAMBA, ECUADOR

Carrying a bundle of mountain grass almost as big as himself, the Indian lad also watches over the lamb carefully. At the market he will sell the grass and, sadly, the lamb as well.

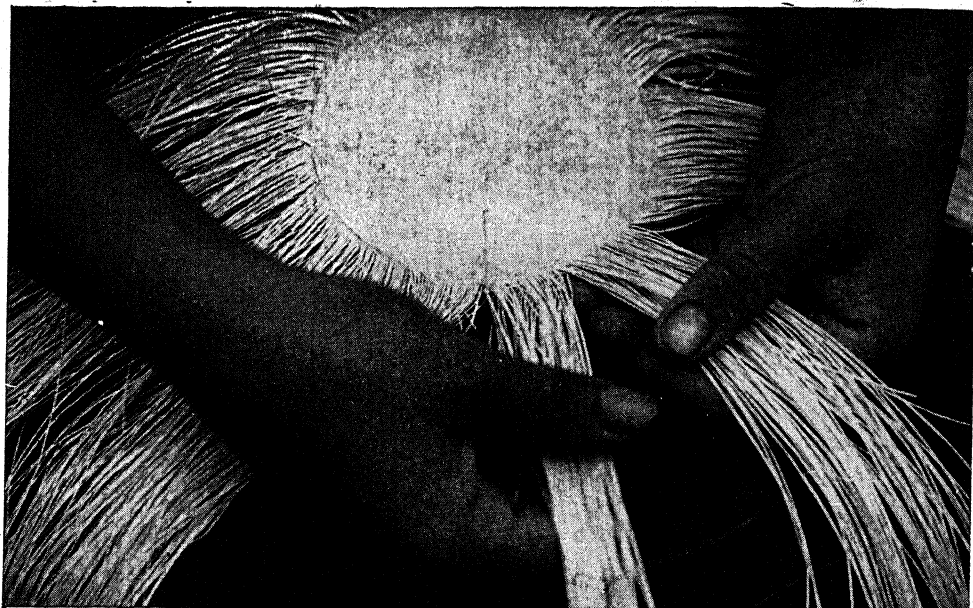
they know Spanish. Among these Indians illiteracy has remained very high as outside the cities of Ecuador schools are scarce. Responsible leaders realize that this situation is one of the greatest obstacles to Ecuador's progress; and more schools have been built in recent years and teachers have been brought in from abroad. There has been a literary awakening as well. Poets such as Jorge Carrera Andrade and Gonzalo Escudero and the novelist Jorge Icaza have attracted attention all over South America by their vigorous, realistic attacks on the neglect of the Indians. Some of the more alert tribes, particularly the Otavalo, have raised their standard of living by developing a profitable trade in home crafts.

Being so mountainous and yet right on the equator, from which it takes its name, Ecuador boasts resources only less varied and extensive than Colombia's. From the seacoast and the valley of the Guayas River come all the usual tropical products and some which are not so common. Kapok is a fibrous material obtained from the silk-cotton tree, and used in textiles, or to stuff mattresses. Vegetable ivory

grows only in Colombia, Ecuador and parts of Perú; it is the nut of the tagua palm, and when ripe is as hard and white as elephant ivory. Another curious product, balsa wood, weighs less than cork and is valuable as insulating material, for it will not transmit heat. Alligator skins from the Guayas River sometimes appear on the streets of American and European cities in the form of shoes and handbags.

But the two things for which Ecuador is most famous are cacao and Panamá hats. The tall evergreen cacao trees grow wild in the Guayas Valley, and are also cultivated in great plantations. This valley used to supply the world with one-third of all its cocoa; then a blight attacked the trees and seriously crippled the industry. Planters are now trying to grow cotton and sugar-cane instead. One of the most important national industries is the manufacture of the so-called Panamá hats, which are made almost exclusively in Ecuador. They are woven of very fine, flexible straw.

In the rainy season the fertile Guayas Valley is flooded, and people go from village to village, from house to house even,



Both pictures, Grace Line

#### CLOSE-UP OF THE BEGINNING OF A PANAMA HAT

North Americans and Europeans first bought these fine hats in Panama, and they still enter world trade through Panama City. However, most of them are made in Ecuador, especially in the towns on the north coast. In the scrub forests of this region grows the "screw pine," or "Panama hat palm." The scientific name of the tree is *Carludovica palmata*, and it is not a true palm.



#### COOL HEADGEAR FOR THE TROPICS AND WARM WEATHER ANYWHERE

The hats are woven from finely divided shreds of immature, unopened leaves. These are slit in such a way that the "straws" remain attached to the stem in hanks of about 55, from 25 to 31 inches long. The finest hats are the texture of fine linen, and one may take months to complete. In Ecuador itself the hats are named for the town of origin, as *sombrero de Jipijapa*.



C.I.A.A.

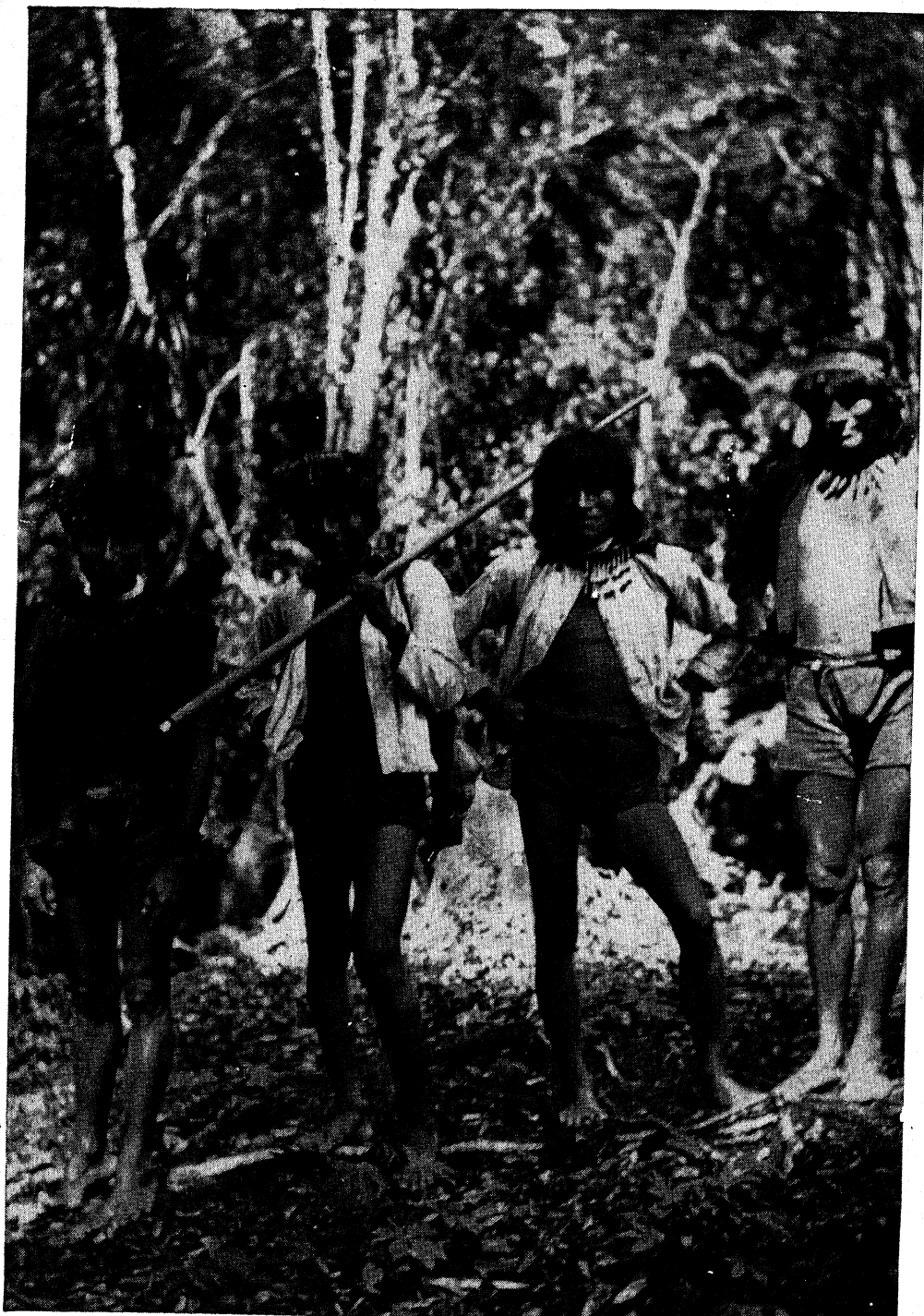
#### LAYING HEAVY AXES INTO THE BASE OF A BALSA TREE IN ECUADOR

Balsa is often called corkwood, but it is twice as light as cork. This quality and its great strength make it valuable in the construction of airplanes and in rafts and floats.

by boat. Houses, of course, have to be on stilts. Guayaquil is the great seaport near the mouth of the river. It is larger than Quito, for all commerce of any importance passes through it. It used to be infected with terrible diseases—yellow fever, and bubonic plague—but strenuous measures have proved that a clean city is usually a healthful city, and nowadays ships are not afraid to put into Guayaquil.

The snowy mountains which rise so abruptly from the tropical coast are potentially quite rich, for Ecuador has gold, platinum and coal which have not been extensively worked. Beyond the Andes the Amazon jungle begins. Perú, Colombia and Ecuador all claim overlapping parts of this largely unexplored territory where savage tribes are the only inhabitants, so

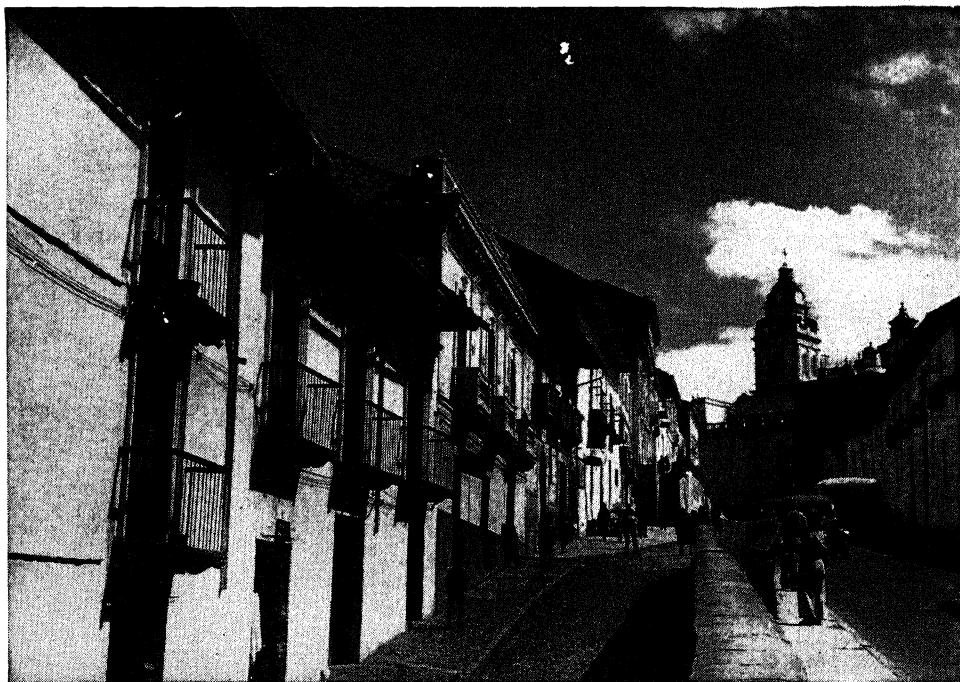
it is impossible to draw the map of Ecuador accurately. One unusual bit of territory is definitely hers, however. That is the group of Galápagos Islands out in the Pacific. The name is Spanish for the tortoises which breed there, huge creatures weighing sometimes six hundred pounds, the largest of their kind in the world. Other rare species of birds, lizards and plants are found on the islands, which are a paradise for the naturalist; types of plant and animal life which have long since disappeared from other parts of the earth have survived here, partly because the group is so completely isolated. But the giant tortoises are now in danger of extinction, as they are killed for their oil. The Galápagos lie directly upon the equator.



AMERICAN MUSEUM OF NATURAL HISTORY

### JIVARO INDIANS FROM THE SHADOWS OF THE ECUADORIAN JUNGLE

The Jivaros live on the eastern side of the Andes Mountains in the upper reaches of the Amazon Basin. They are hunters and use blowpipes, tubes that shoot poisoned arrows.



PAN AMERICAN WORLD AIRWAYS

### A SUN-DRENCHED STREET IN QUITO, LOFTY CAPITAL OF ECUADOR

Balconies, tile roofs and the church of Santo Domingo in the distance all hint of the city's Spanish heritage. Quito was rebuilt by the Spanish on the site of a ruined Inca town.

### COLOMBIA AND ECUADOR: FACTS AND FIGURES

#### COLOMBIA (*República de Colombia*)

Bounded north by Venezuela and the Caribbean, west by Panamá and the Pacific, south by Ecuador and Perú, east by Brazil and Venezuela. The area is 439,829 square miles; and population, 11,259,700. Congress of 2 houses; Senate and House of Representatives elected directly; president elected directly and not eligible for immediate re-election. Catholicism dominant, but other religions tolerated. Education free but not compulsory; 866,877 pupils in 14,962 schools of all kinds; also has 5 universities and 74 colleges.

World's second largest producer of coffee. Other principal crops include bananas, potatoes, rice, sugar, maize, tobacco, wheat, beans, barley, cocoa, cotton and dyewood. Being rich in minerals, the country produces a considerable quantity of emeralds, gold, silver, copper, lead, mercury, manganese and platinum; also much salt, petroleum, cement, soda ash, coal, iron ore, and fire clay. Major imports are machinery, vehicles, chemicals, textiles, paper, glassware and fresh fruit. Railway mileage, 1,914; highway mileage nearly 13,000. Forest lands total 150 million acres; livestock some 20,000,000 head. There are 10 national airlines which make daily flights between Bogota and the chief cities of the country and also the United States. Major towns are Bogota, capital, with a popu-

lation of 643,187; Medellin, 329,965; Barranquilla, 278,269; Cali, 243,463; Cartagena, 110,504.

#### ECUADOR (*República del Ecuador*)

Bounded north by Colombia, west by the Pacific, south and east by Perú. Frontiers fixed by arbitration in 1942. Area is 106,178 square miles; population, 3,076,933, only 8% of which is white, the rest being Indians and of mixed blood. President and single-house Congress are elected directly by the literate men and women. There is no state religion, but Catholicism is predominant. Primary education is free and compulsory in 3,250 public schools having 310,000 pupils. Ecuador also has 71 secondary schools and 6 universities.

Principal products are valuable timber, rice, coffee, cocoa, bananas, cotton, tobacco, sugar, petroleum, fruit, kapok and Panama hats. These goods form the bulk of the exports of the country, which has 10 seaports. Among the major imports are metals, textiles, jewelry, foodstuffs, liquors, drugs and chemicals. Has more than 10,000,000 head of livestock. Highway mileage, 2,000; railway mileage, 765. Wireless and international airlines keep the nation in close touch with its important cities and other countries. Chief towns: Quito, capital, 212,900; Guayaquil, 262,600; Cuenca, 46,428; Ambato, 25,200; Riobamba, 19,500.





UNATIONS

**GROTESQUE MASKS** and hats adorned with long flower sprays are part of the costumes at a festival in Warisata, Bolivia. The dancers step to the weird music of pipes.

# THE LAND OF THE INCAS

## *Historic Highlands of Bolivia and Peru*

There are few chapters in the story of mankind more fascinating than that of the rise of the Incas in the high mountain valleys of the Andes. How, during the Middle Ages of Europe, the Indians of these wind-swept highlands built up their wonderfully organized empire is still a mystery, for they had no system of writing. The Spanish conquest destroyed their civilization, but certain Indian customs and the ruins of many great cities survive as reminders of it. The mighty peaks of the Andes, in their ever-changing colors, have a grandeur all their own, and the mineral wealth in these rocky hills and the fertility of the tropical valleys give promise of a future as flourishing as the remarkable and romantic past.

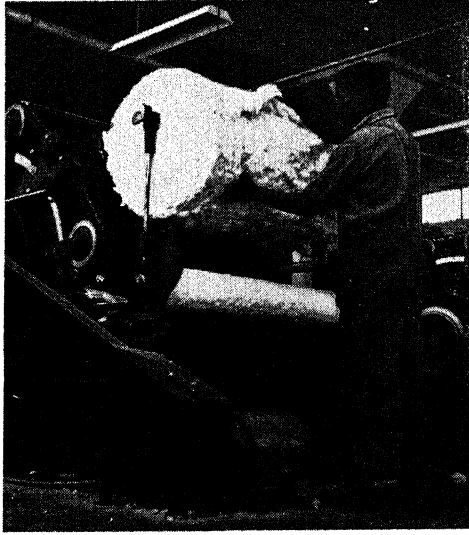
ONE of the most romantic conquests in the world's history is that of Perú by the Spaniards. Francisco Pizarro, the "Conquistador," following the example of Cortés in Mexico, flung himself with a small following of soldiers upon the great empire of the Incas and became its master. This amazing exploit took place in 1532, in a century when every fresh discovery in the New World was stirring men's minds and impelling them to the most adventurous expeditions. Daring as was that overthrow of a mighty and well-organized kingdom, the rise of the Incas themselves was no less impressive. Their empire was not many centuries old. It, too, had been won by force of arms, as the invaders mastered and adopted a civilization higher than their own. There had been many centres of culture in Western South America, but of them we know very little. All that now bears witness to their existence is the ruins of wonderful cities constructed with exceptional skill in architecture and mechanics, and fine pottery wrought with no little artistic ability.

But who were the Inca rulers, the empire-makers of the New World? From what quarter did they come? History can tell us only that these warlike people were in control of a large tribe known as Quichua Indians living in the high plateau country of the Andes, while a kindred race, the Aymarás, settled in the great high valley of Lake Titicaca. Marching, it is thought, from the southwest, the Incas subdued one state after another and laid the foundations of

their vast empire. By the sixteenth century they governed what are now Ecuador, Perú, Bolivia, part of Chile and northern Argentina, and had succeeded in developing a civilization which ranks among the highest achievements of the American Indian race. Above all, they had a genius for organization and their political and social system was remarkably effective. In addition they were engineers who could tunnel the solid rock, fling bridges across great gorges and build enduring roads; they were skillful farmers, and builders whose masonry is still a matter for wonder and admiration. The remnants of the fortress-city of Machu Picchu, perched high up on a rocky mountain-spur above the canyon of the Urubamba River, include stone terraces and extensive ruins of granite temples, palaces and houses. The golden Temple of the Sun at Cuzco, the capital, had massive walls covered with thin plates of gold; its water-pipes were of silver and in the gardens were to be seen animals and insects modeled in gold and silver. The Inca who occupied the throne was both king and god to his people. His person was sacred, for he represented the sun. And just as its rays penetrated every corner, so did his influence extend to every man and woman in the kingdom.

Since the Inca government collapsed, their land has seen centuries of oppression, warfare and struggles for independence. Bolívar, General San Martín and General Sucre freed the region from Spanish rule in the years between 1820 and 1825. Bolivia then separated from

## THE LAND OF THE INCAS



**WHIRRING MACHINERY** at a mill in Said East Hijos, Bolivia, turns cotton into cloth.

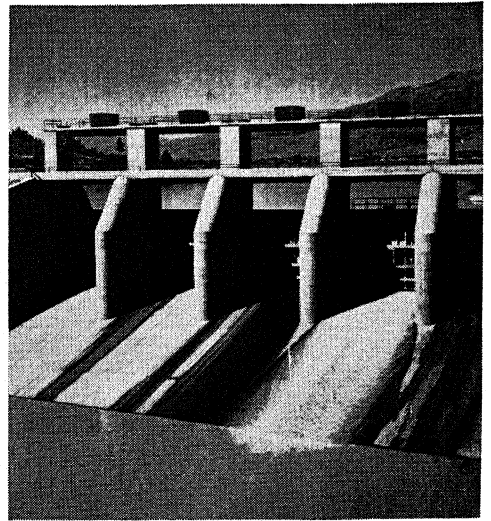
Peru and named itself for the Liberator, in recognition of his great deeds. Both nations have been republics ever since.

The seacoast of Peru is a desert of rock and sand, because no rain clouds from the Atlantic can cross the high Andean summits, while the cold waters of the Humboldt Current sweeping up from the Antarctic make the winter climate foggy and dismal—and “winter” in this latitude means the time from June to August. Yet Peru lies entirely within the tropics, and wherever there is water along the otherwise barren coast, there the soil yields rich returns. Each river valley, every irrigated section, is green with fields of sugar cane, corn or cotton; there are vineyards and orchards and groves of fruit trees.

Below the plateau surfaces of the Andes are gorges carved by the swift-flowing rivers. The bleak mountain tablelands, twelve and fourteen thousand feet above the sea, are girt in by rugged peaks of blue, red, black and dull brown rock, and swept by bitter winds from glaciers and snowfields. Trees are almost as rare in central Peru as in Shetland or Iceland; there is nothing but ichu grass and scanty herbage for flocks of llamas

and sheep, while the Indian farmer reaps a small harvest of millet, barley and potatoes. But down in the river valleys, carefully terraced fields repay the labor of cultivation with tropical luxuriance. So we see that climate in Peru is a matter of ups and downs.

The Indians of the mountain plateaus are mostly Quechuas. Brownish in color, with straight black hair, they are a lean hardy people, but are addicted to drinking much chicha, a liquor fermented from corn, and have a habit of chewing the coca leaf, from which the drug cocaine is obtained. It eases the suffering caused by the intense cold, but dulls the brain as well. As in Ecuador, their typical garment is the strikingly colored poncho, worn over short warm trousers. For headgear they use close-fitting woolen caps, topped off by large felt hats with the brims upturned in front. A favorite is the “pancake” straw hat, covered on one side with coarse woolen material and on the other with gaudy tinsel and velveteen. An old custom that survives to this day is the wearing of tassels and fringes on the headdress. The first Inca ruler, it is said, decreed that such distinguishing marks should be borne throughout the empire, and the different colors



PHOTOS, UNATIONS

**THE ANGOSTURA DAM** provides water for farms in central Bolivia.

## THE LAND OF THE INCAS

used enabled his officials to know at once to which district any Indian man or woman belonged. The Inca government was a totalitarian one in many respects.

### *Market Town Mid Inca Ruins*

Cuzco, center of the ancient kingdom, is a strange mixture of past and present. Features of modern life such as electric lights, telephones and moving-picture houses contrast with the ancient stone buildings erected by the Incas and adapted by the Spaniards. Although there has been a constant fusion of the Indian and Spanish stocks, a large proportion of the population is pure Indian. Every day hundreds come in from outlying villages driving llamas laden with sacks of potatoes and barley for the great market, where the women sit against the walls with tiny piles of merchandise on the stones in front of them. Shops are arranged according to the goods they sell: hatters, saddlers, rope-makers, potters, all congregate in their respective quarters. Here, again, in the variety of wares one sees the strange contrast of old and new, for side by side with articles of native manufacture are imported goods from the factories of Europe and the United States.

Lying deep in an Andean valley, Cuzco has frequently suffered from earthquakes. One of the worst tremblors in modern times occurred in 1950. There was great loss of life, and some of the city's fabulous Inca remains, such as the Temple of the Sun, were damaged severely.

### *"The City of the Kings"*

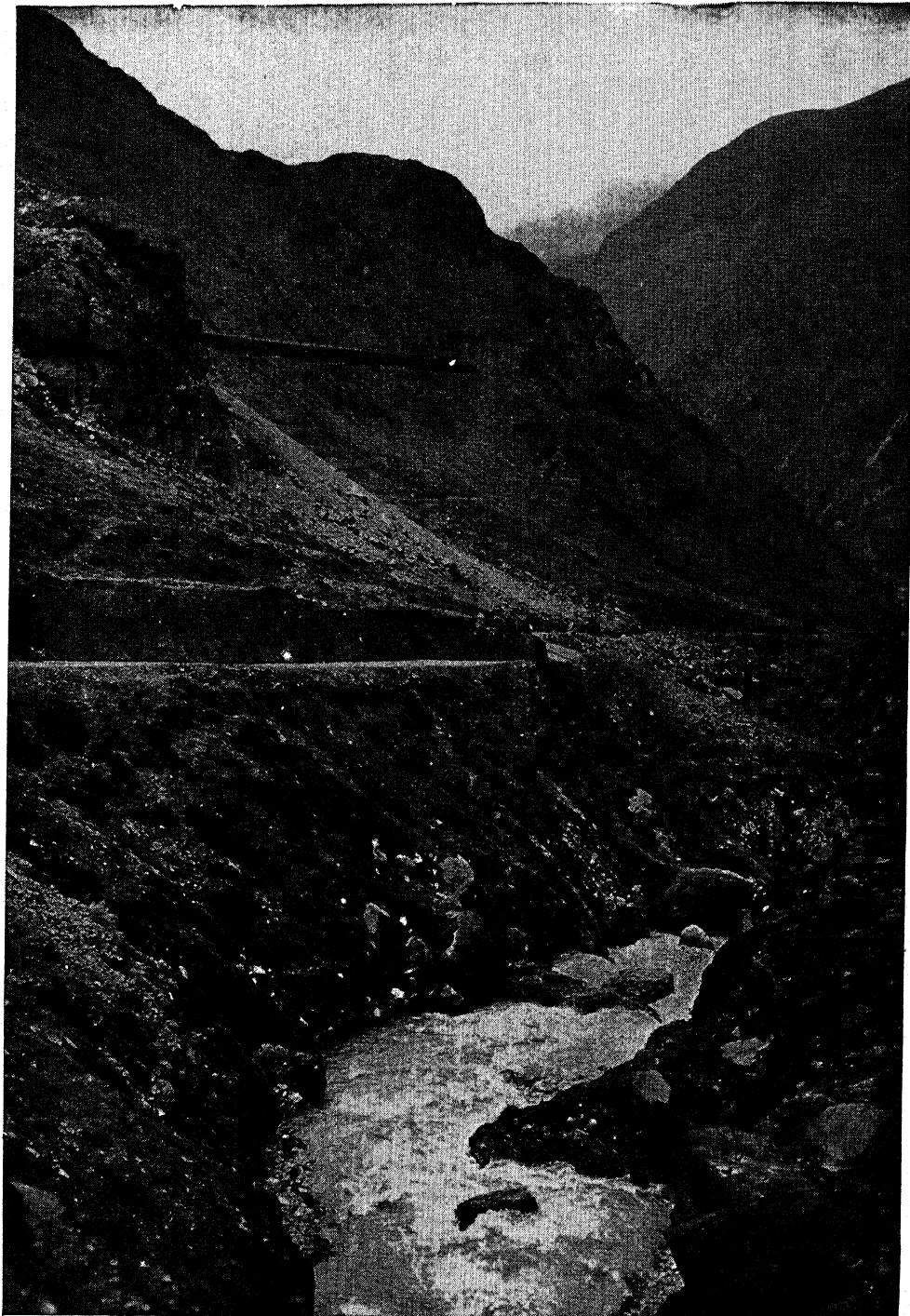
The present capital of Peru is Lima, "the City of the Kings," founded by Pizarro in 1535. From his day to the end of Spanish rule its name stood for wealth and power. In Peru the Spaniards really found the fabulous riches they sought in the New World; Inca strongholds yielded treasure greater than that of any mythical El Dorado; then the silver of Potosi and Cerro de Pasco continued to provide cargo for the annual treasure fleet to Spain. Down from the mines of the rugged Sierra came long pack trains of mules and llamas, bringing the precious



UNATIONS

**A PERUVIAN INDIAN** visits the Andean village of Pisac to market brightly colored textiles and view the ruins of the old fortress built by the Inca long before the white man came.

metals into Lima and its seaport, Callao. From there the galleons sailed up the coast to Panama, and the bullion was well started on its long journey to Spain. In Lima resided the viceroy and the archbishop, rivaling each other in magnificence. Many a fine church and palace gave material witness to the wealth of Peru's aristocracy, until the terrible earthquake of 1746 shook that splendor to pieces and an accompanying tidal wave literally drowned Callao. Yet Lima today seems still the city that Francisco Pizarro built; here still lives many a family tracing descent from one or another of his followers, and the spirit of Spanish days remains. The houses are built around patios, and their low walls line the narrow streets, with beautifully



ELIZABETH HIBBS

### LOOKING LIKE A TOY, A TRAIN WINDS THROUGH ANDES SUMMITS

You can just barely see the train in the top half of the picture. It is on the tracks of a railroad that ascends more than fifteen thousand feet to cross the Andes in western Peru.



## THE LAND OF THE INCAS

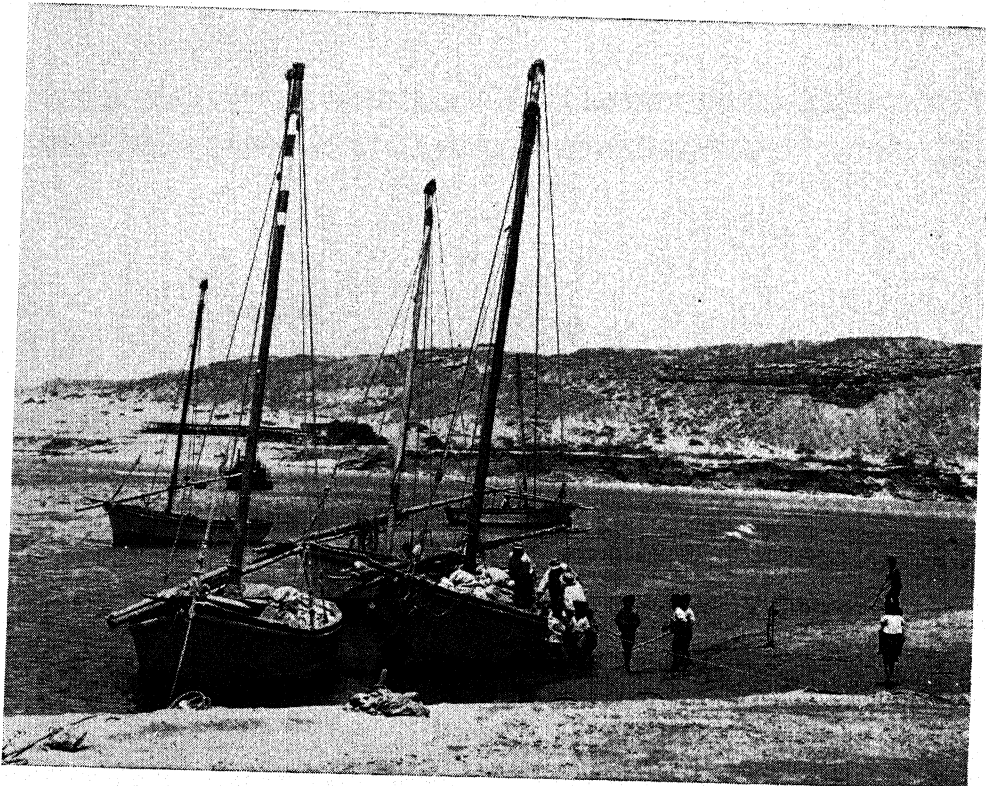
carved wooden balconies projecting from second-story windows.

But Lima is more than an ancient city with an Old-World air. It is old, to be sure, but it is also the capital of a modern state undergoing renewed development. The government encourages reclamation of the desert coast by means of irrigation, and is directing the greatest project of all, which is to change the course of the Huancabamba River and carry it through a tunnel under the Andes, so that instead of emptying into the Marañon it will water thousands of acres as it flows out over the desert to the Pacific.

To reach the mining country, one must travel up into the heart of the mountains. The famous mines of Cerro de Pasco are connected with Lima and Callao by an equally famous railroad. That is the Central Railway of Perú, the highest

standard-gauge road in the world. Cerro de Pasco has extraordinarily rich deposits of copper, which is mined by the most up-to-date processes, and the modern machinery makes the mining town seem very old and quaint. Its adobe houses are painted in bright colors and they seem to crowd each other for room on the crooked cobbled streets. It is a busy community, filled with thousands of Indian and cholo laborers—each man in his striped poncho, each woman in thick shawl and voluminous heavy skirts. The one thing they do not wear is shoes—and that in a climate where blizzards are to be expected as often as the wind shifts.

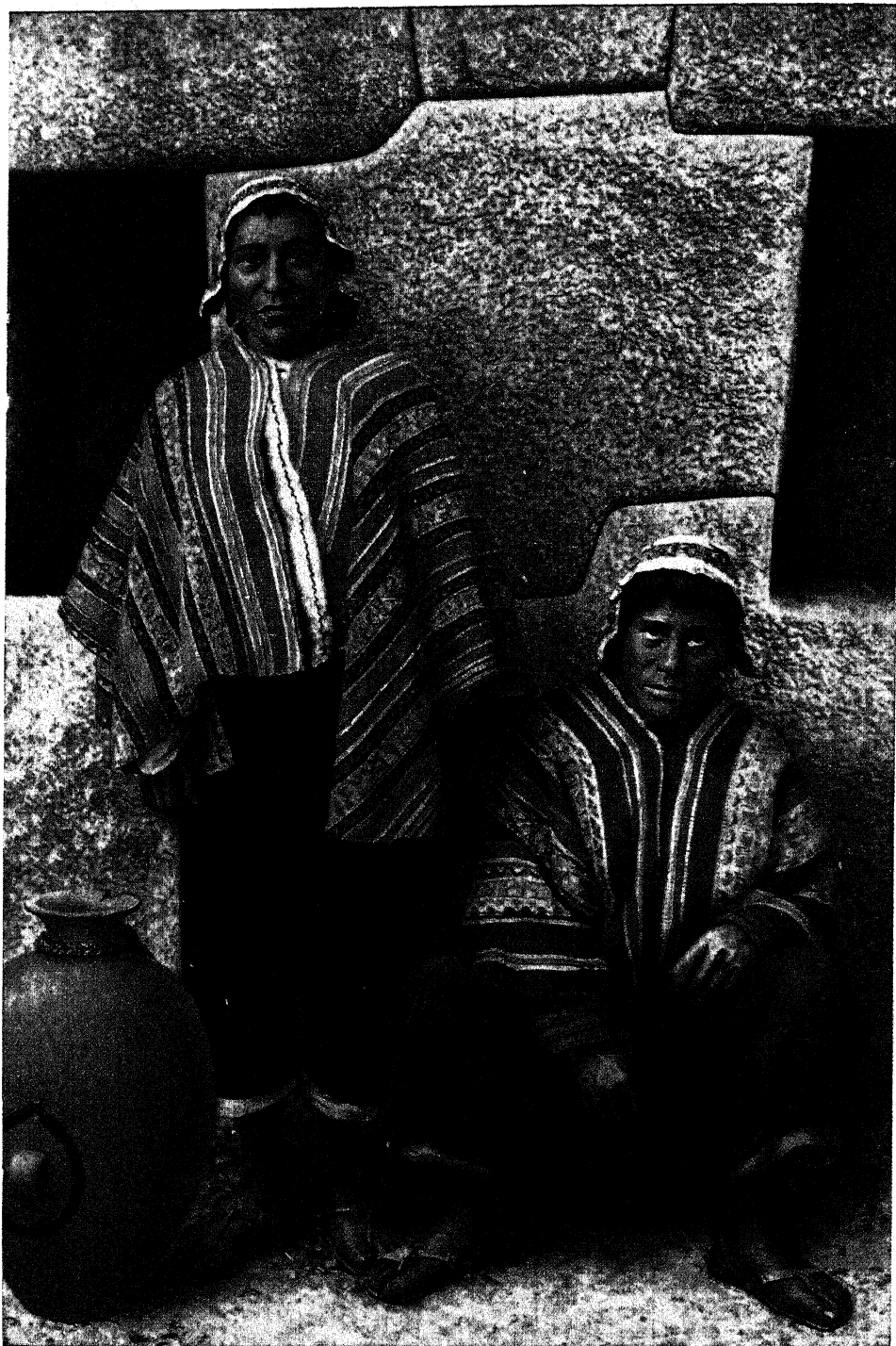
Gold is found on the eastern side of the mountains, where the country takes on a far different aspect. Stretching away to Brazil is the wide Montaña, a great alluvial plain thickly covered by



STANDARD OIL CO. (N. J.)

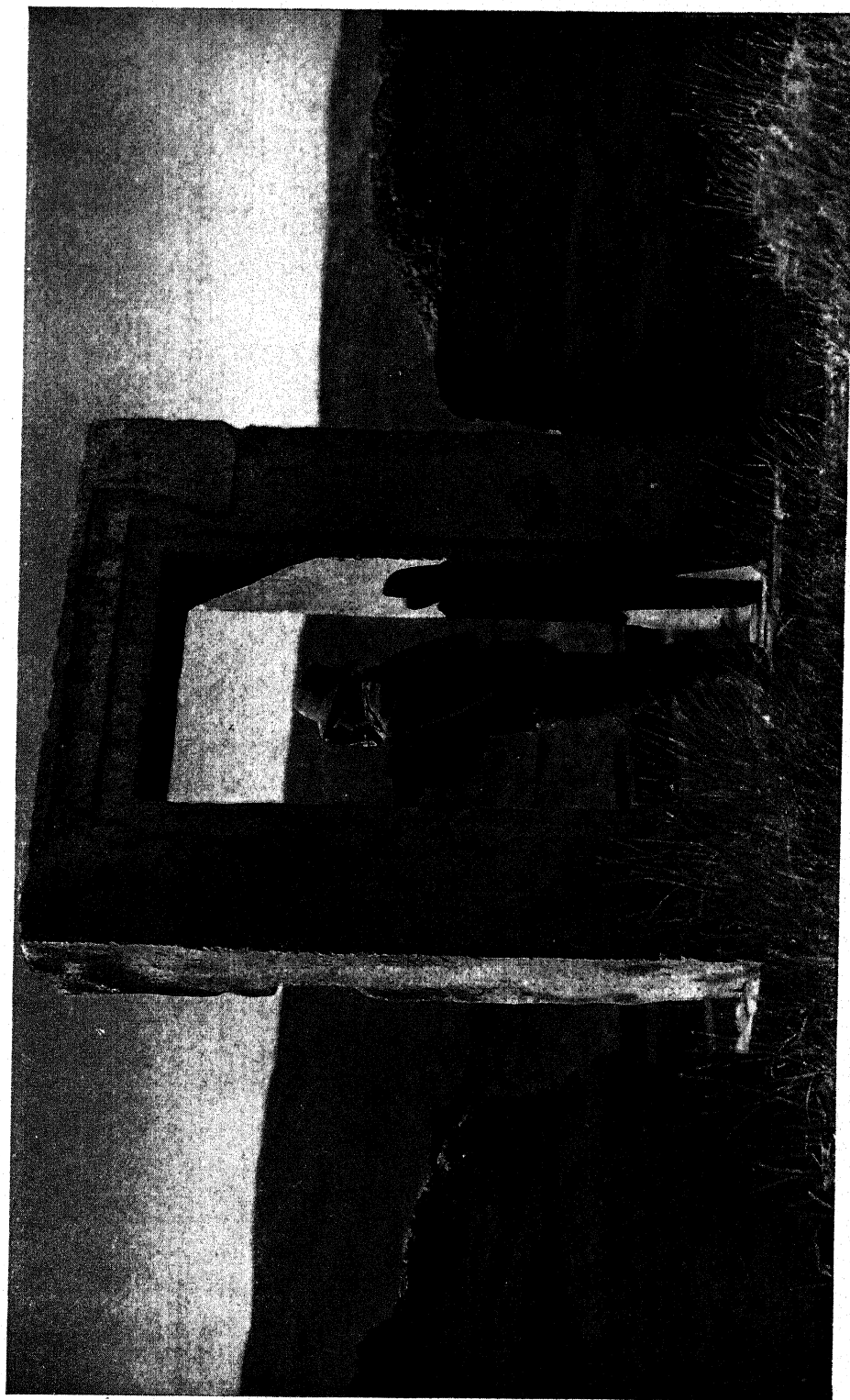
### PERUVIAN FISHERMEN BRINGING HOME THEIR CATCH AT TALARA

Talara is a Pacific coast port in northwest Peru, on the Pan-American Highway. Center of the Peruvian petroleum industry, it is also the main shipping point for its oil and oil products.



© E. N. A.

**AYMARA POTTERS** in bright ponchos and knitted caps are typical of the Indians seen on the streets of Cuzco. That so much Inca stonework like this massive old wall remains intact is a striking tribute to the patient skill of the builders, who used no mortar, yet fitted the great stones so carefully that a knife-blade cannot enter the cracks.

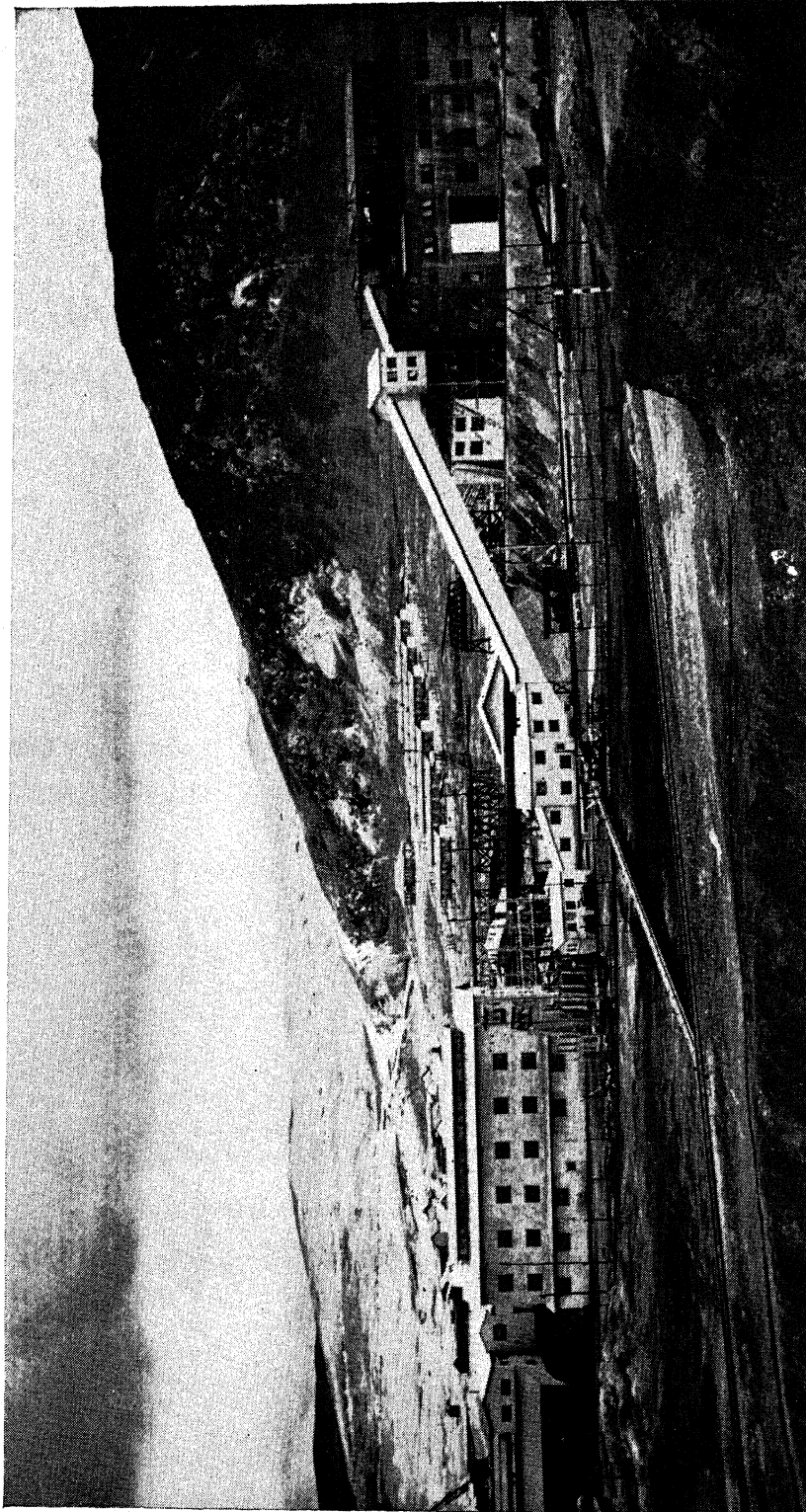


#### THE PORTALS OF THE PAST

at Tiahuanaco are older than the Inca buildings of Cuzco and fully as wonderful, for the men who built this massive gateway were the ancestors of Indians over whom the Incas ruled. The Indian standing here is of ancient race, but he lives in a dreary

EWING GALLOWAY

village near the once-splendid city of his forefathers and leads a life less civilized than theirs. Among the mysterious ruins of Tiahuanaco are remnants of temples and palaces, and a great rectangular enclosure marked off by huge stone monoliths curiously carved.



EWING GALLOWAY

**CERRO DE PASCO, PERUVIAN CITY AND CENTER OF MINING, 13,673 FEET HIGH IN THE ANDES MOUNTAINS**  
Cerro de Pasco first gained its reputation as a silver mine three hundred years ago. Today it produces immense quantities of copper and, in comparison, little silver. The copper ore often assays at 10 per cent, but it occurs at an altitude of 14,000 feet. This makes it almost impossible for

anyone but Indians, accustomed to the rarefied atmosphere, to work in the mines. The altitude has also created many problems in the construction and operation of smelters. Breaker buildings and conveyers appear in the foreground. Smelters are located at Oroya, seventy miles away.

## THE LAND OF THE INCAS

tropical forest and jungle. The Ucayali and other large rivers cut through it, flowing north to join the Amazon, which, as the Marañon, rises in the Andes of northern Perú and then breaks through the mountain wall on its way east to the far Atlantic. The Indian tribes of the Montaña are savages with limited knowledge of agriculture; they exist largely by hunting, and for houses build simple huts of wattles and mud. They are expert canoeists, since the waterways here are the principal highways.

The Montaña has wild rubber but wild rubber lost its world importance as rubber plantations developed in the Far East. When the supply of plantation rubber was cut off during World War II a gigantic synthetic rubber industry emerged and now thrives as a substantial world competitor, for it produces a substance, the properties of which may be controlled. Yet Perú has a natural rubber port, Iquitos. From

here rubber, ivory nuts, lumber, coca leaves and Peruvian bark are shipped down the great river through Brazil to Pará and the outside world. Until recently it was easier to reach Iquitos from Lima by going clear around via Buenos Aires and Pará than by crossing the Andes and struggling through the jungle. Now there is air service between Iquitos and Lima, bringing within a few hours of each other the coast and the far interior. Perú has benefited from the development of aviation as much as Colombia, for her transportation problems are fully as difficult.

In the adjoining republic of Bolivia also, life would be vastly different were it easier to travel from one place to another. What is more, Bolivia lies close to the heart of South America, entirely cut off from the sea. To reach the Pacific, the tin and silver from her mines must cross either Perú or Chile. Rubber from her northern forests is shipped clear



© Publishers Photo Service

### BEAUTIFUL TILE-WORK IN THE DOMINICAN CHURCH AT LIMA

Lima lies in the valley of the River Rimac, with the Andes at its back, and the Pacific seven miles distant in front. Its history has been one of revolution, siege and earthquake, but from all these it has recovered, to display itself in greater dignity, richness and beauty than before.

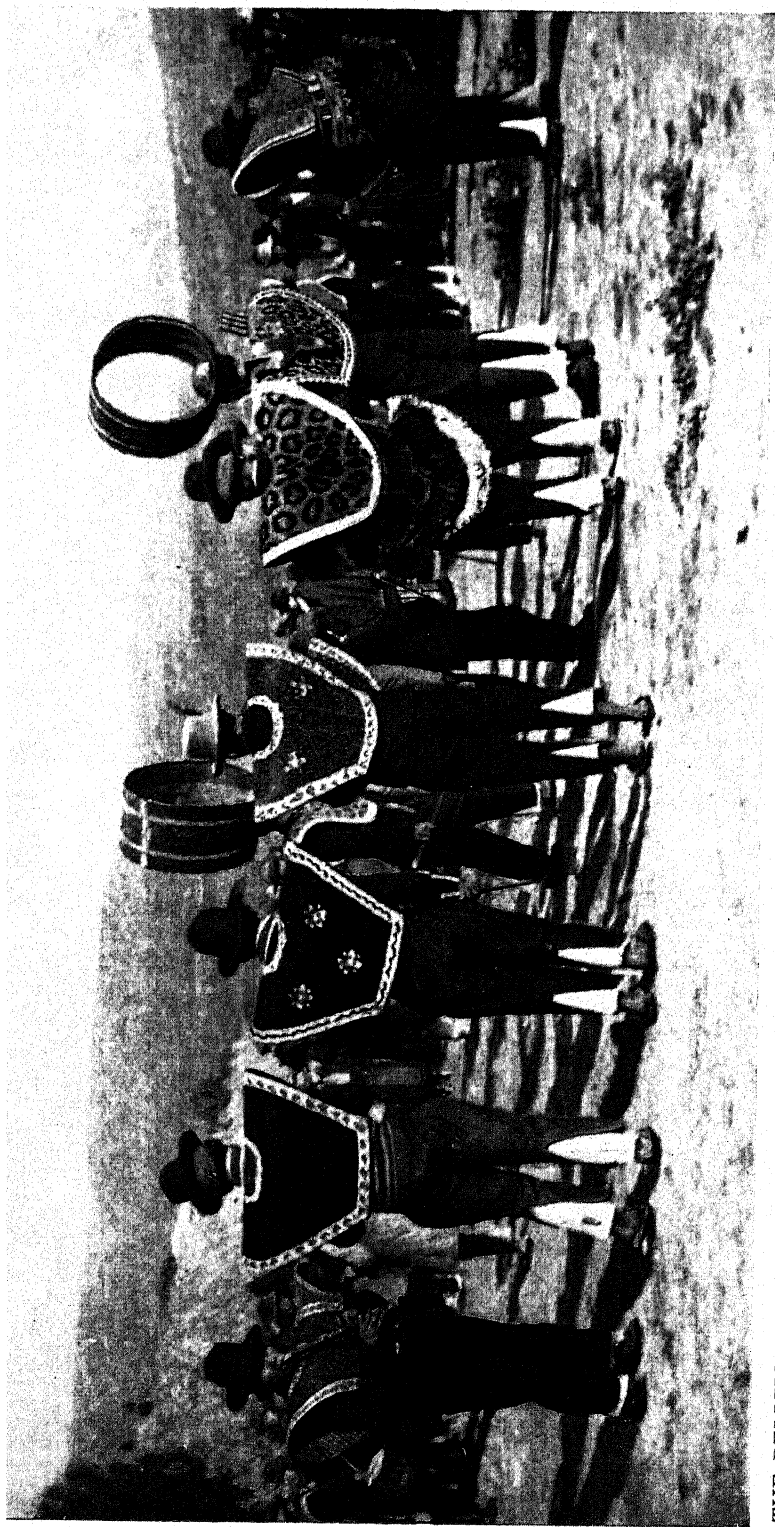
This is a vista in the cloisters of the Dominican Church.





ANCIENT PERUVIAN POTTERY was fashioned without a potter's wheel, but the variety of design and coloring fully made up for this defect in technique. Human faces, crayfish, mice and two different kinds of birds may easily be picked out among the decorations on these bowls

and jars. The quaint, conventionalized little human figure is holding coca leaves like those the Peruvian Indians chew to-day. The water-jars have narrow spouts to prevent rapid evaporation, and the second spout makes pouring easier by letting in air.



THE RELIGIOUS FEAST DAYS of the Bolivian Indians are often a strange mixture of Christian practices and less civilized rites. In many ways the ceremonies of both the Aymaras and Quechuas resemble those of their forefathers who, in days before the Spanish conquest, worshiped

the sun-god and honored him with riotous celebrations. The stiff skin breastplates and the strange hooped hats are special fiesta finery, but the trousers with the slit up the back of the leg, showing the white underdrawers, are typical of the Aymara costume.

## THE LAND OF THE INCAS

across Brazil by river and rail. Crops from the fields around Santa Cruz go out by way of the Paraguay River and Buenos Aires. Yet at that it is easier to get in and out of the country from either the Atlantic or Pacific than to get from one end of it to the other. If one enters from Perú by way of Lake Titicaca, the countryside seems much the same as that left behind. The altitude is still very great—over twelve thousand feet. Snow whitens the surrounding mountain peaks, and sparse crops of barley or potatoes grow on the lake shore. Here and there the low huts of an Indian village blend into the background of fields and rocky slopes. One sees not only Quichuas but many Aymarás, who dress in much the same general way as the Quichuas, with styles in hats and caps varying from village to village.

These Indians comprise the greatest part of the population in both Peru and Bolivia, yet they live in poverty, separated from the rest of the people by both language and customs. The Bolivian Government granted universal suffrage in 1952 and began land redistribution the following year. This gave the Indians an opportunity to leave the mountainous west for land grants in the eastern plains. Peru has begun a program to improve farm methods and social conditions.

Peoples of mixed Spanish and Indian blood form a somewhat distinct class in Bolivia. As in Perú, they are called "cholos," which is equivalent to the word "mestizo" used in most Spanish-American countries. The Bolivian cholos are often found as shopkeepers in the towns and cities, and are fairly well-to-do. The women wear a distinctive hat, shaped like a tall derby but made of white straw very heavily varnished. A cholo is scarcely ever seen without this precious piece of clothing; she seems to value it more highly than her gorgeous silk shawl or her high white kid shoes.

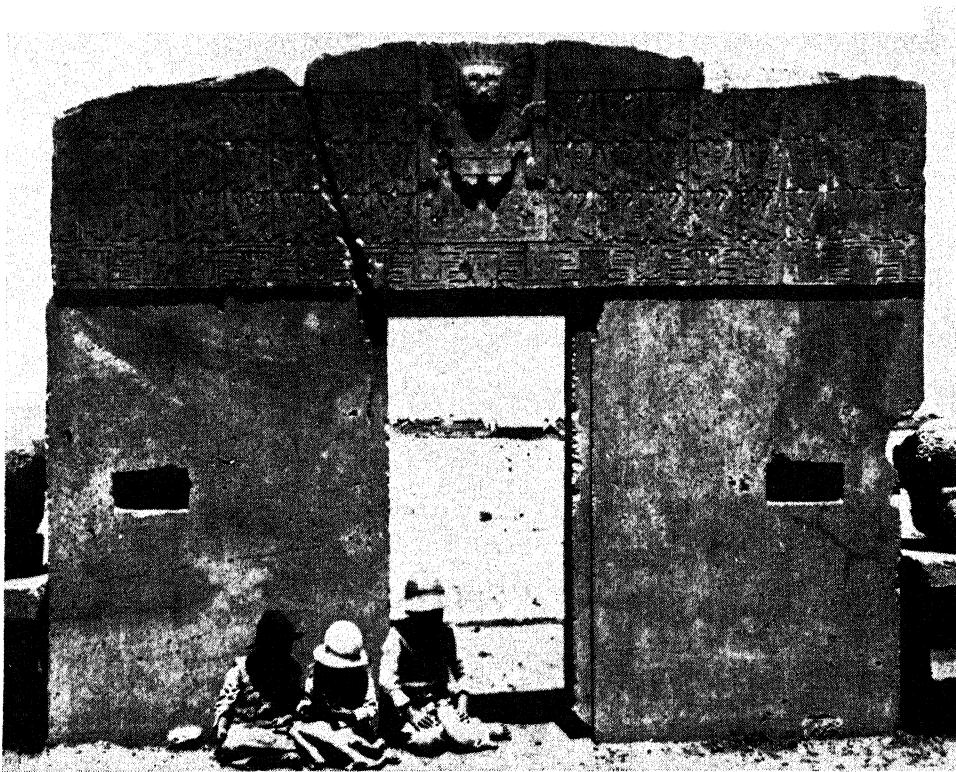
Indians, cholos and most of the white live in the mountainous western part of Bolivia. The great high tableland around Lake Titicaca is bordered on each side by the Andes, which here extend over a wider east-to-west area than elsewhere. Although spread out, they are nonetheless high; Mt. Sajama and Mt. Sorata tower more than twenty-one thousand feet into the air. Only Tibet and the Himalayas may be called the roof of the world.

La Paz itself, the chief city, is the world's highest capital. It has a singular location in a deep canyon of the central Andes. Though less romantic than Lima it is rather more picturesque, and the rocky sides of the canyon seem like stupendous walls built roundabout to protect



PAN AMERICAN—GRACE AIRWAYS

**ON LAKE TITICACA**, high in the Andes between Bolivia and Peru, fishermen venture out in rafts called balsas. They are built by lashing bundles of reeds together.



**THE GATEWAY OF THE SUN.** The sun-god still presides over the crumbling doorway probably once part of a temple. The ruined city is Tiwanaco, incredibly old.

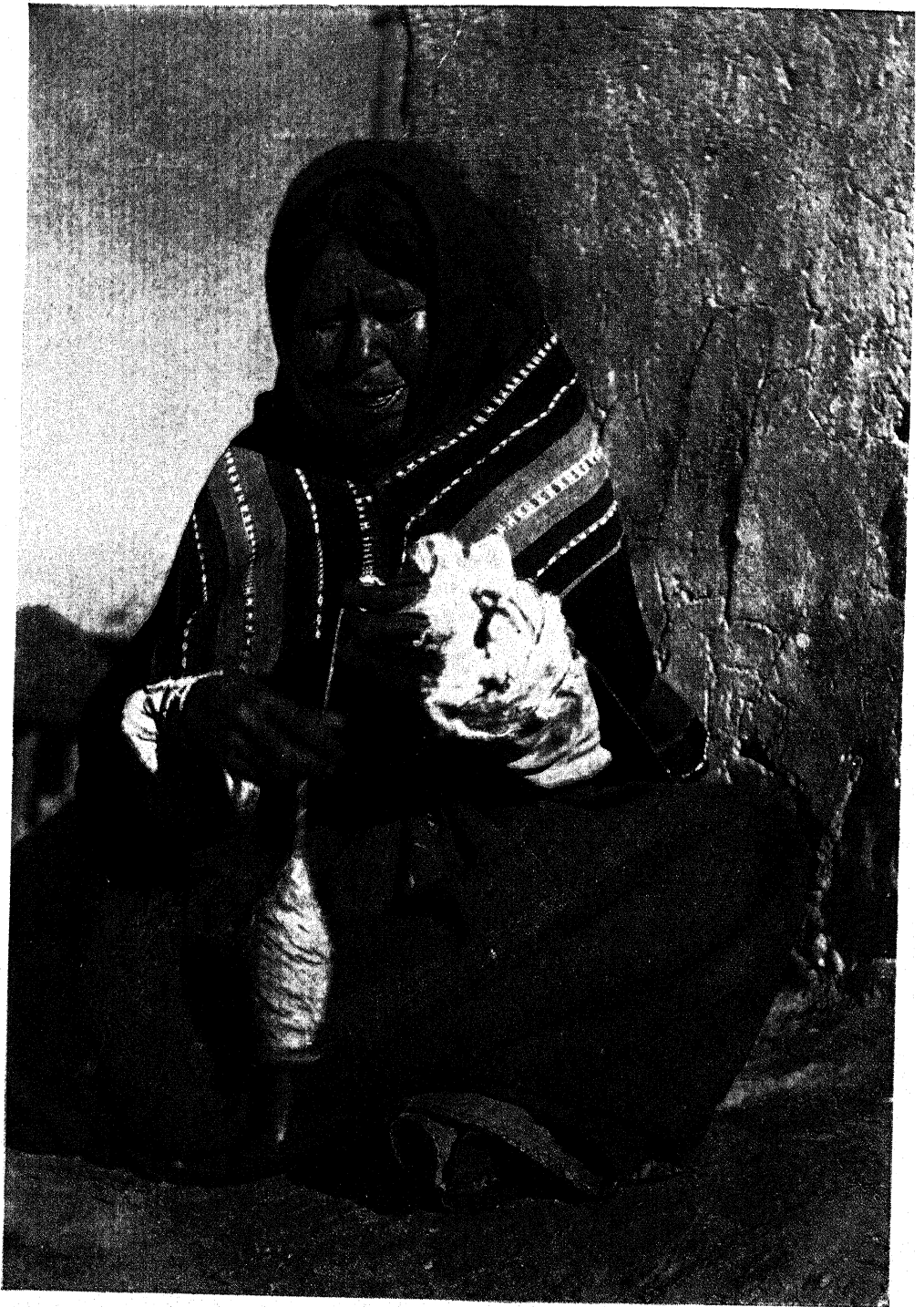
the red-roofed houses and the church towers. Oddly enough the legal capital is Sucre, farther south, but the government has its headquarters at La Paz, which is the commercial and railway centre as well.

Railway building is so costly and difficult that much of Bolivia's mineral wealth lies untouched in the rocky hills. Tin and silver are the two metals produced in greatest quantity; one-third of the world's tin supply comes from the Bolivian Andes, while the silver mines of Potosí have been famous for generations.

The Spaniards never got very far beyond the Andean section. They preferred the cool air of the high plateau to the heat of the semi-tropical llanos and the Chaco wilderness. Consequently the greater part of the country is only now being opened up. There are tropical valleys which if intensively cultivated would make it unnecessary to import food for the non-agricultural plateau. As it is, Indian

porters and pack trains of llamas or mules carry fresh fruits, sugar and coffee up to La Paz every week, converging at the market there on Sundays.

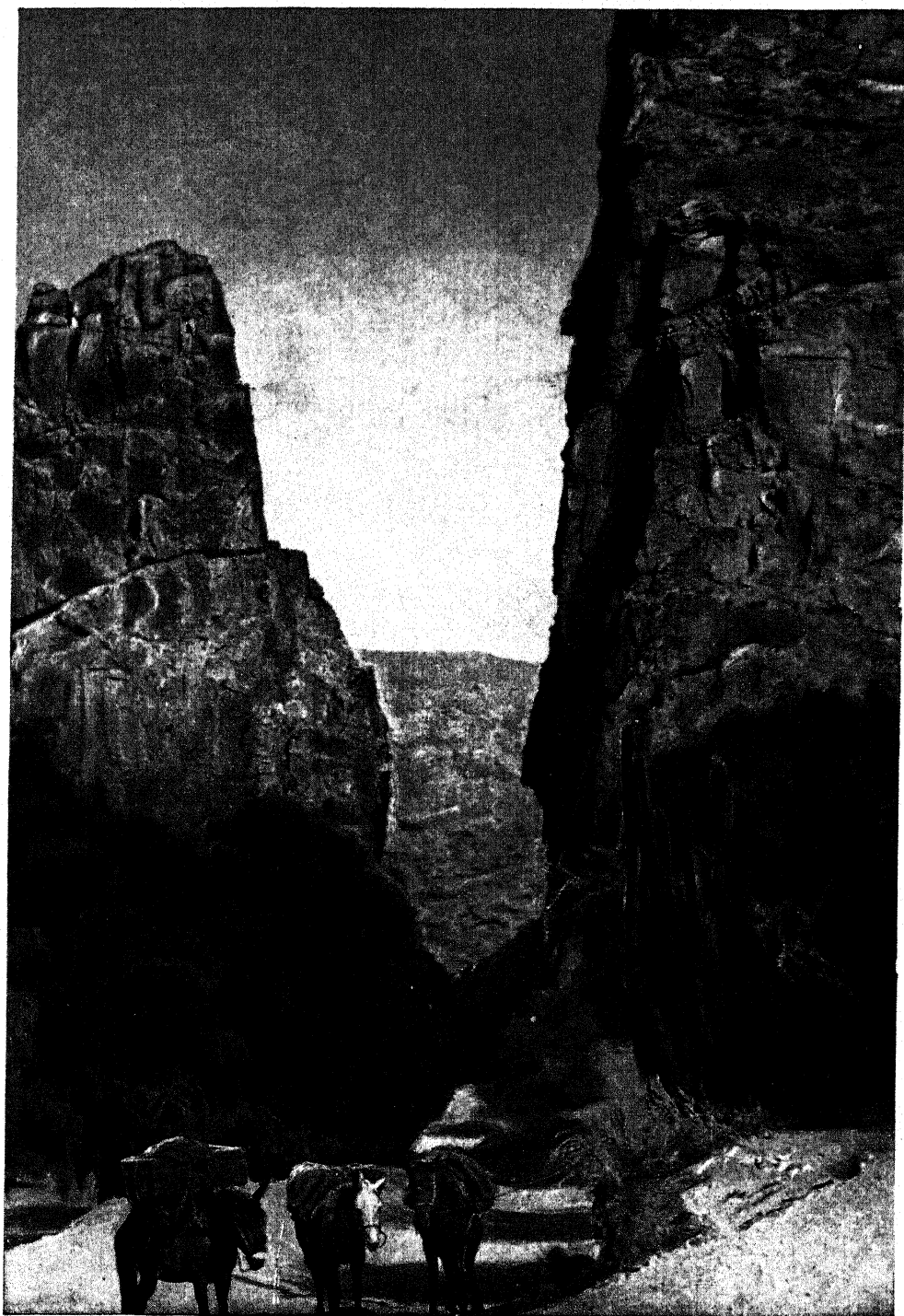
Like the Peruvian Montaña, tropical Bolivia is inhabited chiefly by primitive hunting tribes very different from the Indian folk of the plateau. The civilization of the Incas did not affect the forest Indians, nor has modern civilization reached them yet. Although the Aymarás and Quichuas also live primitively now, the society of their ancestors was well advanced. Their forefathers developed a civilization suited to their own needs. In Inca days and earlier, Bolivia and Perú supported a far greater population than now. Bolivia has many relics of the past, and the ruins at Tiwanaco are evidence of a civilization far older than the Incas—as old as the pyramids of Egypt. Now, though, it is only a matter of time before conditions in these Spanish-Indian lands will be improved.



EWING GALLOWAY

**NATIVE CLOTH** in Andean lands like Bolivia and Perú is woven from the fleece of the llama, the "camel" of South America. With yarn which they spin as this woman is doing, Quichua and Aymará women make their heavy woolen shawls and thick skirts. The more skirts a woman has, the happier she is, and she always wears all of them at once.





EWING GALLOWAY

**A NATURAL GATEWAY** of rock near Tupiza in Bolivia determines the route by which pack trains get through the mountains. Andean trails are often bad; they are rough and steep, now buried in snow and now swept by bitter winds, and hailstorms are frequent in the winter season in these highlands ten or twelve thousand feet above the sea.



ELIZABETH HIBBS

### HAUGHTY LLAMAS PICK THEIR WAY THROUGH AN ANDEAN VILLAGE

The llama of Bolivia and Peru is related to the camel but has no hump. Though it is not a friendly animal, it carries heavy burdens patiently. Its wool is made into cloth.

### BOLIVIA AND PERÚ: FACTS AND FIGURES

#### PERÚ (*República del Perú*)

Bounded north by Ecuador and Colombia, west by the Pacific, south by Chile, east by Bolivia and Brazil. Area, 514,059 sq. mi.; estimated population, 7,023,111, counting uncivilized Indians. Constitutionally, the executive power is vested in a President elected for 6 years and the legislative power in a Senate and a Chamber of Deputies. Franchise granted to literate males over 21 years of age. Chief crops: sugar, cotton, coffee, wool, hides and skins. Attention is being given to growing cocoa, wheat and rice. Tobacco, wines and spirits, olives, ramie, rubber and corn are also produced. Valuable tropical forests provide balata, quinine, quinoa, kapok, rotenone and other cabinet and medicinal woods. Large guano deposits used as fertilizer. Livestock, 24,835,000 head. Abundant mineral wealth includes petroleum, lead, zinc, copper, silver, gold. Chief exports: sugar, cotton, petroleum, lead. Imports: machinery and vehicles, foodstuffs, pharmaceuticals, cotton goods. Railway mileage, 1,900; highways, 21,680 mi.; telegraph lines, 12,880 mi.; 51,407 telephone sets. State religion, Roman Catholicism but all creeds tolerated. Education free and compulsory between ages of 7 and 16; 10,316 primary, 229 secondary, 119 technical, 36 rural Indian, 27 normal schools, 2 technical colleges and 4 universities. Chief towns, estimated populations: capital, Lima, 835,468; Arequipa, 97,110; Callao, 87,587;

Cuzco, 55,634; Trujillo, 47,728; Iquitos, 42,018.

#### BOLIVIA (*República Boliviana*)

Bounded north and east by Brazil, south by Paraguay and Argentina, west by Chile and Perú. Area, 404,388 square miles; population, 3,054,000. The Government's executive power is vested in a directly elected president; legislative power is vested in a Congress of 2 houses—a Senate of 27 members and a Chamber of Deputies of 110 members. About  $\frac{3}{4}$  of entire area is undeveloped. The main wealth is in minerals and rubber. Bolivia produces 15 per cent of the tin output of the world. Other minerals: silver, lead, copper, zinc, antimony (28% of world production), wolfram (10%), petroleum, large deposits of common salt. Exports: tin (73% of total value), silver, rubber, zinc. In cultivated area, potatoes, maize, cacao, coffee, barley, coca and rice are grown. Imports: sugar, other foodstuffs, textiles, mining machinery and implements, vehicles, petroleum. Railways, about 1,500 mi.; telegraph lines, 10,950 mi.; highways, 6,280 mi. Dominant religion, Roman Catholic, other faiths allowed. Primary instruction free and compulsory; 1,740 elementary schools. Besides 104 secondary and special schools, there are 5 universities. Estimated population of chief towns: La Paz (actual seat of government), 321,063; Cochabamba, 80,795; Oruro, 62,975; Sucre (capital), 40,128.

# THE LONG, THIN COUNTRY

## Chile—from the Tropics to Cape Horn

The name Chile comes from an Aymara Indian word, *chilli*, which means either "the far-away land" or "the best of the land." In the Quechua language of the Incas, however, the long land to the south was described as *chiri*, or "cold," in reference to the cool southern regions. On the map, Chile looks like a sword lying on the flank of the Andes, with the point—Cape Horn—thrusting toward the South Pole. Within this territory are a vast desert, fertile valleys, wild forests, quiet lakes, eerie fiords, some of the highest mountains in all the Americas, and bustling modern cities such as Valparaiso and Santiago.

CHILE is the longest and narrowest country in the world. Compared to the vast extent of Brazil, South Americans are used to thinking of Chile as a "small country." Actually, it is the eighth in area of the Latin American countries and larger than any European nation except Russia. Chile's extreme length of 2,600 miles is equal to the distance between Alaska and Mexico or between Scandinavia and Timbuktu in Africa. Yet in width, Chile varies from only 50 to 250 miles.

This narrow fringe of land hangs from the Andes Cordillera, second only to the Himalayas in height, like a gay balcony over the largest of oceans. The desert at the northern boundary with Peru, the natural frontier of the Andes with Bolivia and Argentina, and the sea in the west and south give Chile the psychological character of an island. During the past century Chileans often were called the British of South America. They saluted forth as sailors, and some were among the first adventurers in the California gold rush. Chile also produced landscape painters, as England did, who quietly depicted the loveliness of their land. Also like the British, the Chileans are fond of home life and proud of their independence.

An elegant Chilean writer, Benjamin Subercaseaux, called his country a "geographical extravaganza," a world-in-little in which there is every kind of climate and terrain. One can describe Chile only by exploring part by part its long body. Nature is different in each zone.

In the arid provinces of the extreme

north—Tarapaca, Antofagasta and Atacama—the average temperature over a year is 67° F. In the Central Valley the temperature climbs up and down between 35° and 70° F. At Cape Horn in the far south the average is 9.5° F.

Chileans call the immense desert in the north a pampas, though it is one of the driest regions on the globe and has practically no vegetation. In this aloof, strangely beautiful landscape, where the sole touch of green is the cactus growing on bare rocks, is the main wealth of Chile: nitrates, iodine, copper, sulfur and salt. Only one river there, the Loa, reaches the sea. The other streams are swallowed up by the thirsty desert. Except for the busy seaports and the *oficinas* (field stations), most of the desert is a vast, lonely place in which there are only about three inhabitants per square mile.

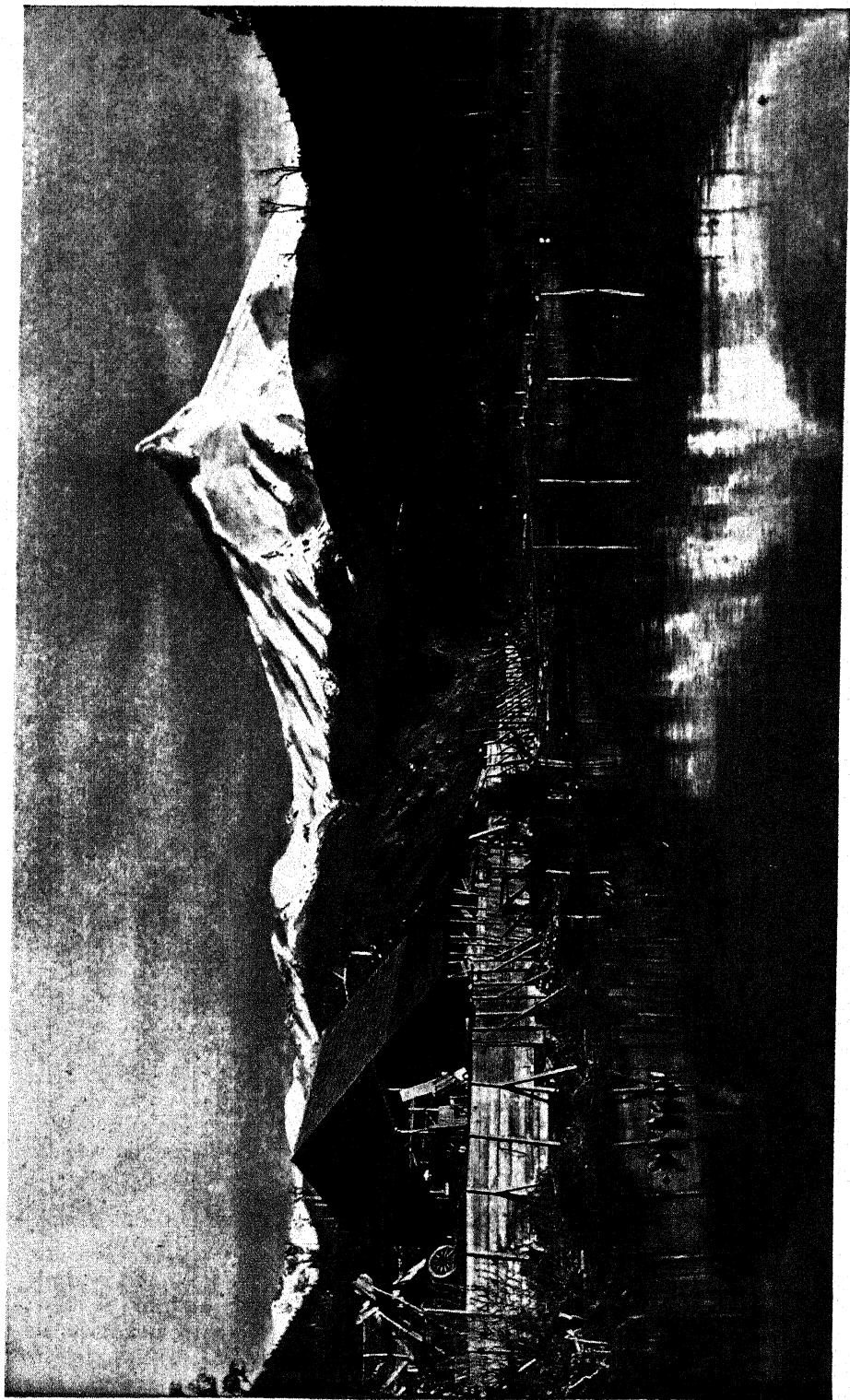
In some of the valleys hidden in the highlands, however, there are refreshing oases, at long distances from each other. Gabriela Mistral, Chile's great modern poet, calls them the "axilla" of the naked land. Water springing from nobody knows where gives life to vines, grass and Biblical fig trees. In some of these oases, like the one in San Pedro, Atacama Province, stand old colonial churches with wonderfully carved wooden images, left there by the conquistadors four centuries ago.

The man of the north, the Nortino, is the strongest, darkest, tallest and most cheerful of all Chileans. He is a good worker, with a lean body well adapted to the rigors of desert mining. Chilean prize



**THE ATACAMA DESERT** is one of the great arid districts in northern Chile. Much of this region is as barren as the eroded hills in the background, and a stretch of land with water enough to supply cactus and thorn bushes is a welcome relief to travelers weary with the glare of

the sun on bare sand and rocks. Huge cactus plants grow up in many fantastic forms showing a strange beauty all their own, and give a touch of contrast to the reddish landscape. The foremost rider is wearing the poncho so popular for country use in Chile.



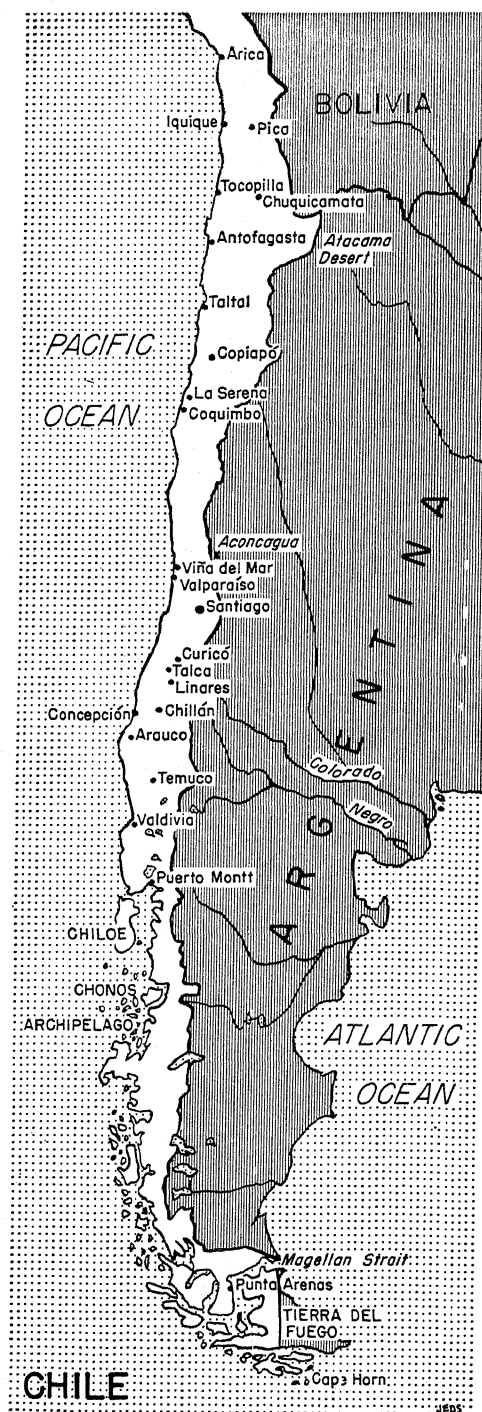
CHILE MAGAZINE

**THE "CHILEAN SWITZERLAND"** in the southern province of Chiloé is a country of lakes, woods, glaciers and volcanoes, with heavy rain nine months of the year—as different as possible from the barren northern deserts. In summer southern Chile has a delightful climate

which brings out all the beauty of its alpine scenery. This is a corner of Lake Todos los Santos (All Saints' Lake), and the lovely snowy peak is Mt. Puntagudo. The lake was once part of nearby Lake Llanquihue but lava from a volcano divided the water.



## THE LONG, THIN COUNTRY



THE ANDES SPINE separates Chile from its eastern neighbors, Bolivia and Argentina.

fighters are usually Nortinos.

South of the desert, the province of Coquimbo, with its capital city La Serena, still remembers the conquistadors of the sixteenth century and the British pirates of the seventeenth. Legends of Sir Francis Drake's treasure persist. In every Serenense there is a treasure hunter. The province is a paradise with a temperate climate. There lies the fertile Valley of Elqui, where Gabriela Mistral was born. She describes her native valley as "surrounded by one hundred mountains or more—offering a tribute in red or saffron," where the birds sing "under the shadow of the fig tree." Very sweet grapes and wines are produced in this zone, and some tropical fruits, such as the chirimoya, or cherimoya, something like a custard apple.

At the southern end of Coquimbo, in Illapel, you can see the Pacific Ocean from high in the Andes, through only fifty miles of clear air, under an electric-blue sky.

The fertile middle zone of Chile is called the Central Valley, also the Longitudinal Valley, because of its length. Actually several vales, it begins with the Aconcagua Valley (the Chile Valley of pre-Spanish times). Valparaíso, the main port of Chile, and the national capital, Santiago, are here. From Santiago you can see the highest mountain in all the Americas—Aconcagua (22,843 feet), with its summit in Argentina. From everywhere in the countryside of the Central Valley one is constantly aware of the magnificent backdrop of the Andes, their snow-clad peaks reaching to the sky. There are thousands of volcanoes in these mountains; and though many are extinct, cities in the north and south have been destroyed, from time to time, by volcanic earthquakes.

### *Santiago, Andes City*

In Santiago, the Moneda Palace and some churches remain as stone monuments of the seventeenth century. Yet Santiago is a modern city, spaciouly laid out with broad avenues. Trees, gardens, flowers are as important there as office

## THE LONG, THIN COUNTRY

buildings, mansions and palaces. The climate is delightful. On summer evenings you can feel the fresh dry breeze from the Cordillera—the Andes spine—or, if the wind blows in the right direction, smell the ocean, only two hours automobile ride away. Equally short rides from Santiago bring you to the best ski fields or the most beautiful beaches in South America.

Along the coast, especially in the vicinity of Valparaiso, are a number of gay seashore resorts, connected by a fine highway. Among these resorts are Viña del Mar (vineyard by the sea), Zapallar, Concon, Quintero, El Tabo, Algarrobo and Cartagena.

### *The Lovely Central Valley*

In spite of the fact that the main sources of Chile's riches are the mines and the sea, it is the Central Valley that is the best-known part of the country. Following the tradition of the Spanish *encomenderos* (landlords), it is chiefly an agricultural region. This is one reason why visitors usually forget northern and southern Chile and think of the fertile area between the Andes and the Cordillera de la Costa—the coastal ranges—as the typical landscape of the country. Long lines of aspen trees stand sentinel between the green fields, and willows bend gracefully from the banks of rivers and streams.

Through this lovely countryside, on wonderful horses—descendants of Arabian horses adapted to the American land—rides the king of the land, the *huaso*, or Chilean cowboy, one of the best horsemen in the world. On holidays he goes to town decked in colorful array, wearing the short poncho or manta, which floats in the sunny air. Around his waist is a red sash, revealed under a short white jacket. He is shod in high boots with high heels so that there is a constant singing clicking of his heavy silver spurs. From his deeply tanned face, adorned with a dashing mustache, his white teeth flash in smiles and laughter.

Just as the *huaso* is the traditional peasant of Chile, so is the *roto* the repre-



B.O.A.C.

**FENCE-SITTING** as practiced by a farm worker. He wears the ever present poncho.

sentative of the city poor people. After the war against Peru and Bolivia in 1879, the valiant *roto* became the symbol of all the Chilean people. Both the *roto* and the *huaso* are noted for a wit and humor inherited from their Andalusian ancestors, and for a deep sense of loyalty and honor.

Once, Antonio, a famous flamenco singer (Spanish gypsy entertainer), was asked by a *rotito* in Santiago, "For one peso, señor, I'll sing you a song." The singer replied, "And how much if I ask you not to sing?" "Well, then, two pesos!" To which Antonio exclaimed: "But this kid is surely a gypsy from Seville!" The quick answer and the joke are always ready on the smiling lips, as the bright dark eyes are measuring you steadily.

Poets have paid homage to the eyes of the Santiaguina, the girl or woman of Santiago. From beneath the sweep of

## THE LONG, THIN COUNTRY

long lashes, the Santiaguina's eyes gleam like deep wells under Oriental palm trees.

Below the Central Valley is a beautiful region where limpid lakes nestle below the towering peaks of old volcanoes—Villarica, mirrored in the lake of the same name, Lake Llanquihue and Todos los Santos with volcanoes Osorno and Tronador, and many more—and the Laja River rushes down in a foaming cascade. To many artists and other visitors, the lake region recalls a Japanese landscape. More often, however, it is called the American Switzerland, though one is less aware of the hand of man among the Chilean lakes. Wild forests march to the very edge of the water; and the stark figures of the snow-covered volcanoes are mirrored in rippling blue or green.

More than a century ago in the lake district, German colonists established cities that flourished where the primeval woods had reigned for thousands of centuries. Today modern hotels offer every comfort to the visitor.

At Puerto Montt the Longitudinal Valley comes to an end. Farther south are the Isles of Chiloe, the last Spanish stronghold. Their emerald knolls, which remind one of Ireland, are misted in almost constant rain.

From the Bio-Bio River south, which was once the home of the Araucanian Indians, the land is crossed by numerous streams and covered with forests of about twenty different species of native or European trees. Altogether in the south, there are about 130,000,000 acres of woodland.

### *"Fire Land" Far South*

At the extreme southern tip of Chile are the territory of Aysen and the province of Magallanes (Magellan) and Tierra del Fuego (Fire Land). Huge flocks of sheep have grazed here for many years, and lumbering has long been important. Though the land is only half explored, it has become a lively pioneering region. A great natural resource has been discovered there—petroleum. It is being brought out, financed by Chilean capital and under the supervision of the

Chilean Government, at Manantiales.

On the Straits of Magellan is the most southern city in the world, Punta Arenas.

Along the southern "canals," or sea channels, that wind through the mass of islands that make up Tierra del Fuego—between the Straits of Magellan and Cape Horn—is an incredibly fantastic landscape. Viewed from the deck of a steamer, one great fiord after another opens up in eerie beauty. In Tierra del Fuego live the remaining few hundred truly primitive people of the Americas: Onas, Yahganes and Alacalufes.

The first groups to inhabit what is now Chile, as far as we know, were a variety of Indian stocks. Then Castilians and Basques came from Spain, finally putting their stamp on the country.



PANAGRA

**CHRIST OF THE ANDES**—the giant figure marks a pledge of friendship with Argentina.



MONKMEYER

**THE ALL AMERICAN HIGHWAY** as it sweeps through Chile. When the vast inter-American project is one day completed, it will link all of the countries of the Western Hemisphere.

In 1520, sailing the strait later named for him, the valiant Portuguese navigator Magellan was the first European to descry the Chilean shores. Then, in 1536, Diego de Almagro tried in vain to conquer Chile. Five years later, however, Pedro de Valdivia founded Santiago as a capital for the new Castilian colony and then went to fight the Araucanians in the south. There he met death bravely under an Indian *macana* (a kind of club).

Though the Spaniards subdued and pacified the Indians from North America to Peru, the Araucanians continued to resist for three centuries. It was not until after Chile achieved independence (proclaimed on September 18, 1810) that the Araucanians, or *mapuches* (natives), sur-

rendered to the Government. Today in the southern districts there remain only about 50,000 Araucanians. Most of them are Christians but they are still strongly attached to their old traditions.

Chile is a democratic republic governed according to the constitution of 1925, which replaced one of 1833. A Spanish writer, Dr. Pedro Lain Entralgo, rector of the University of Madrid, wrote that "Chile presents an example to every Spanish-speaking country, Spain included, of institutional seriousness and constitutional continuity."

In the violent adjustments following the struggle for independence from Spain, while almost every Latin American nation was torn by revolution, Chile was



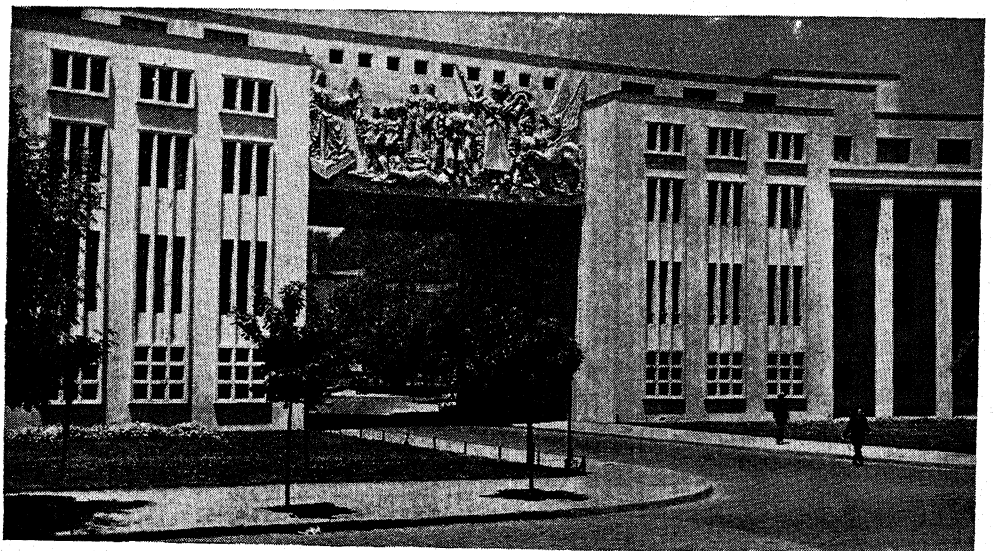
MONKMEYER

**CONCEPCION'S TRANSPORTATION TERMINAL** is one of the many modern buildings erected in the city after 1939. In that year an earthquake wrought terrible destruction.

progressive and quiet and grew prosperous. Only two revolutions have taken place in Chile since 1810: one in 1891 as a result of a dispute between the President and Parliament; and a rather pacific one in 1924. Orderly government and democratic life were hastily resumed on both occasions. With its stable past and

its rich tradition of justice and freedom, Chile has produced outstanding historians and jurists.

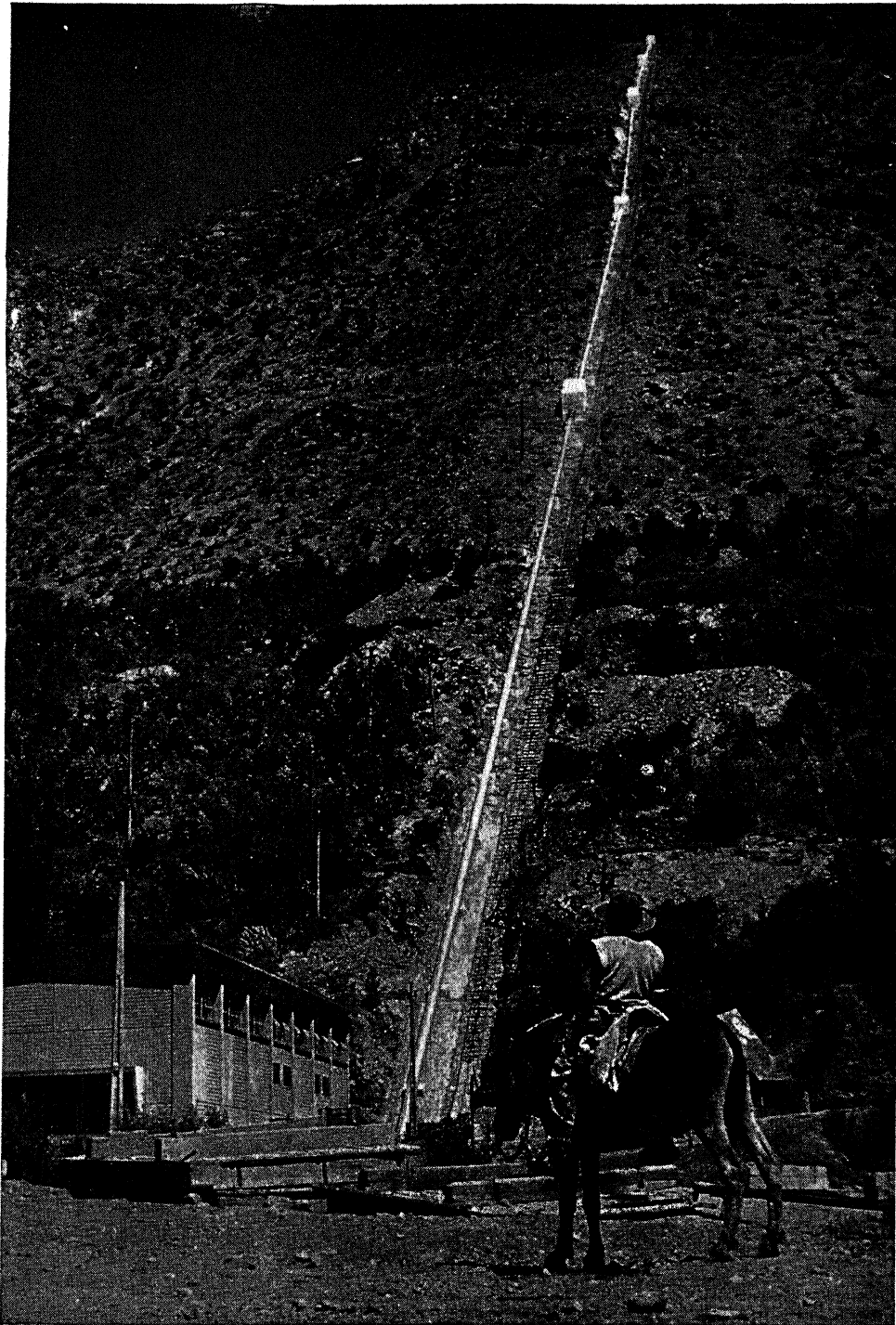
Tolerance and true democracy mark a land of social progress and devotion to law. I remember a dinner in honor of a distinguished Argentinian professor of law at the Club de la Union in Santiago.



PANAGRA

**A SCULPTURED RELIEF** adorns the "bridge" that joins the two wings of the University Center in Concepcion. The attractive city is in the vanguard of higher education in Chile.





UNATIONS

**AT THE HYDROELECTRIC PLANT** at Los Molles, the penstock, a sluice for controlling the flow of water, rises for nearly three-quarters of a mile up the side of a mountain.



PANAGRA

**LOVELY GARDENS** surround the casino at Viña del Mar, internationally famous resort that is practically a suburb of Valparaíso, Chile. *Viña del mar* is Spanish for "vineyard of the sea."



HAMILTON WRIGHT

**CITIZENS OF SANTIAGO** bustle through the city's shopping district on a chilly day. Cool winds sweep over it from some of the highest peaks in the whole Andes Mountains.



ELIZABETH HIBBS

**SALINAS BEACH**, Valparaíso, offers those bent on a holiday an invigorating blend of ocean breezes, fine sand, cliffs and pounding surf. Chile has a number of similar resorts.

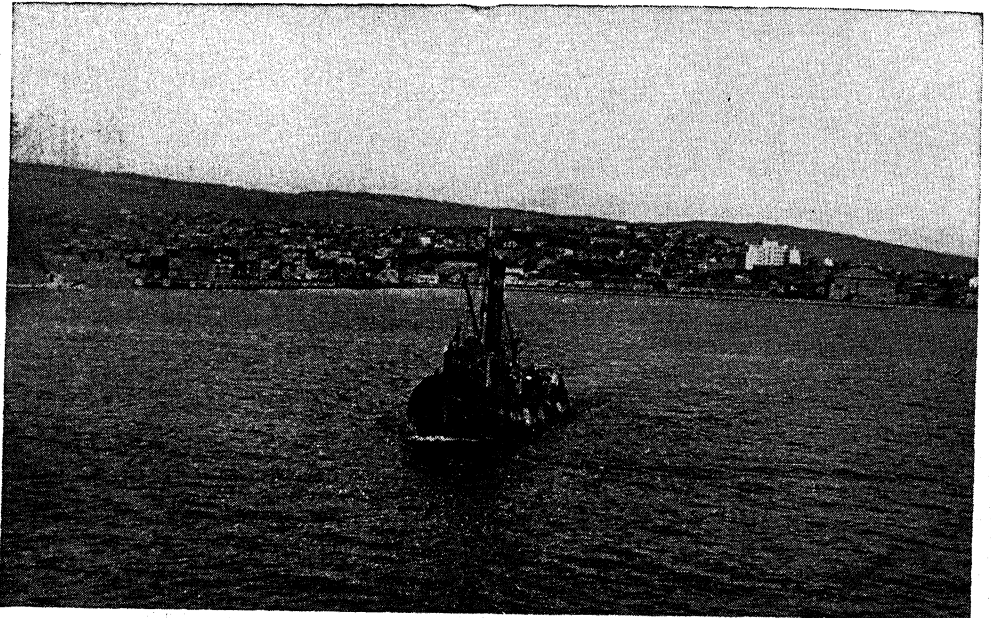
Most of the Faculty of Law of the University of Chile were present. A visitor was astonished because only four days after a hard-fought presidential election, there were sitting amicably together one of the defeated candidates and the campaign chiefs of the two other candidates. No one could have guessed from their cordiality that they had been on opposite sides in a bitter political struggle only a short time before.

The cultural life of Chile is mainly represented by its universities: the national University of Chile and the Catholic University, both in Santiago; the private University of Concepción; and the public and private faculties of Valparaíso. In addition, there are two technical universities: the Federico Santa María, in Valparaíso, and the Escuela de Artes y Oficios (School of Arts and Trades), in Santiago.

The National Library in Santiago, with its 591,290 volumes, is one of the most important in the Americas and one of the few in Latin America to have a scientifically made catalogue. Students from all

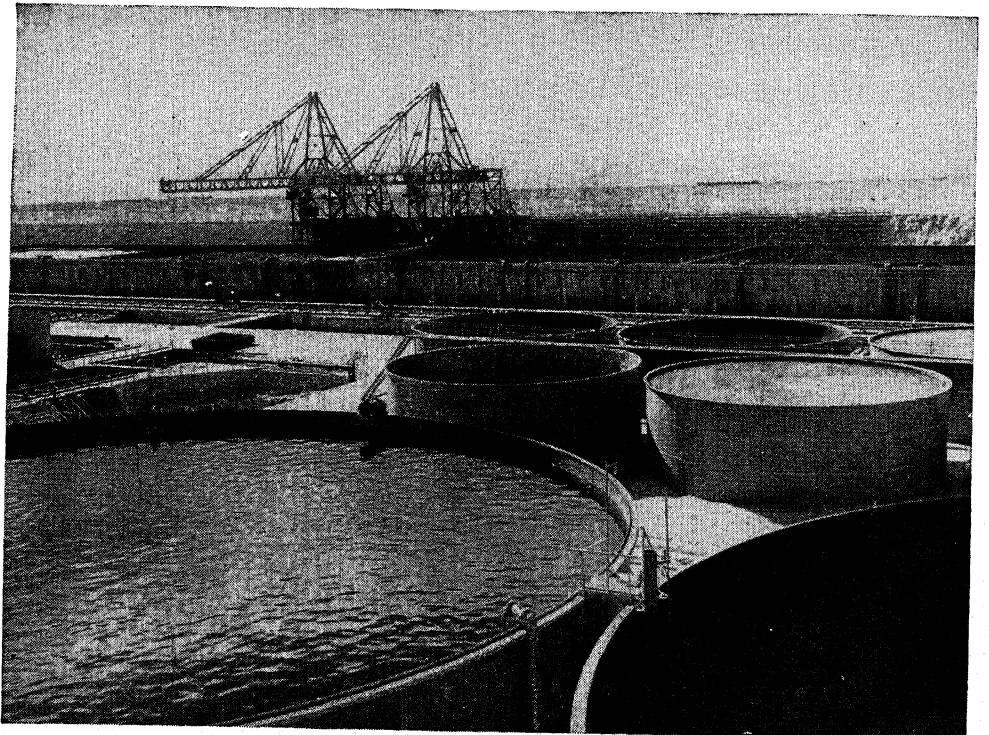
over the Americas attend the Chilean universities. Their teachers, architects, physicians, engineers and other professionals are among the best. The rate of illiteracy in Chile is one of the lowest in the Americas, only 12 per cent.

Literature, painting, music, sculpture and architecture are lively arts in Chile, and the people as a whole have a deep interest in them. One of the first realist novelists in the Americas was a Chilean, Alberto Blest Gana, and there are many modern novelists of note. A Peruvian critic, Luis A. Sanchez, says that Chilean poetry stands today as the best in Spanish America. Chile has the only Latin American Nobel Prize winner in literature (1945), Gabriela Mistral, the poet we have already mentioned. Among the high-ranking writers of Spanish America are the poets Pablo Neruda, Pedro Prado, Manuel Magallanes Moore and the novelists Eduardo Barrios, Mariano Latorre, María Luisa Bombal, Jenaro Prieto, Marta Brunet, Manuel Rojas, Benjamin Subercaseaux, Federico Gana, Baldomero Lillo. Many others continue



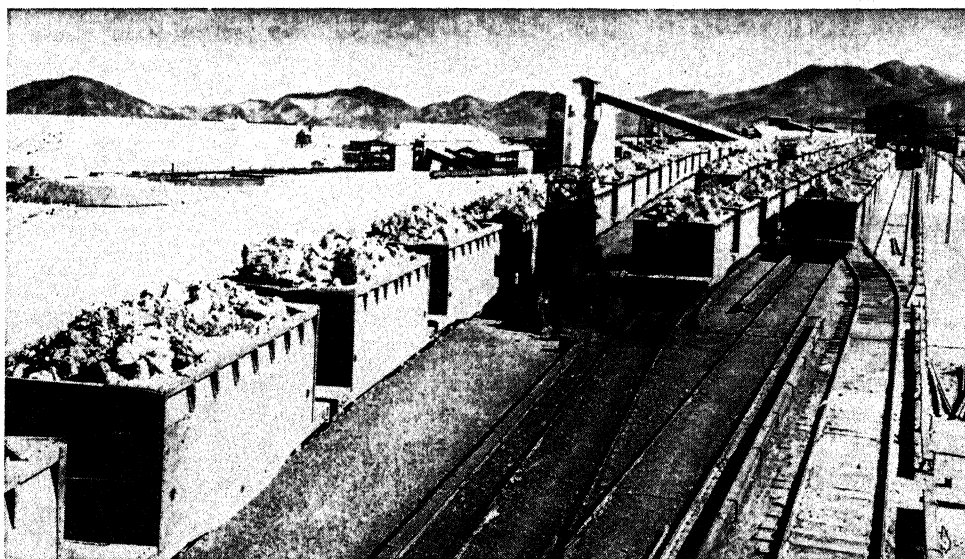
THREE LIONS

**A TUGBOAT CHUGS** through the icy waters of Magellan Strait past Punta Arenas (Sandy Point). The bustling and very up-to-date port is the southernmost city on the globe.



C.I.A.A.

**STORAGE TANKS** in one of the northern nitrate plants. Chile once supplied almost all the world with nitrate; but for many uses, synthetic products have taken the place of nitrate.



G.I.A.A.

**CARLOADS OF COPPER ORE** roll from the mines of Chuquicamata, in northern Chile. The country's resources of the ruddy metal are among the richest to be found anywhere.

the old tradition of the man of letters, which has been a cultural influence since the early days of Chile, with such names as Ercilla, Pedro de Oña, Pineda y Bascañan, Rosales, Ovalle, Molina, Gay.

The most internationally famous Chilean name in music is that of the pianist Claudio Arrau. He was once the only foreigner teaching at the Berlin Conservatory.

The city of Concepcion and the two universities of Santiago have well-trained choirs. The experimental theaters of both universities present yearly to the Chilean public classic Spanish plays or modern plays. Among the latter, the works of many foreign playwrights are offered in translation.

In industry, Chile is growing apace. With its hundreds of waterfalls, it has an abundance of water-power possibilities. In fact, the country possesses 15 per cent of the hydroelectric energy of South America (more than 7,000,000 kilowatts). Today water power is being developed rapidly, to provide electric power for the industries.

Agriculture is also fast abandoning old-fashioned methods, and farms and livestock-raising are being mechanized.

Northern Chile specializes in the production of natural nitrate and iodine, copper and sulfur. Coal, gold, silver, iron, manganese, cobalt, aluminum, wolfram (tungsten) and lead are mined. We have mentioned the discovery of oil in the far south. Two steel mills, particularly the huge one at Huachipato, near Concepcion, export laminated steel.

Other Chilean industries are: cement (600,000 tons exported yearly); ceramics (pottery, porcelain); fine glass work; copper articles, including cables, besides copper exports, second in the world; machinery; tools; lamps; boats; furniture; shoes and other leather goods. Chemical and drug products include penicillin, sulfas, vitamins and adrenaline. In the 1950's, automobile and aircraft factories were planned.

The textile industry is widely known. It turns out finished woolen goods (chiefly from Magallanes sheep); fabrics made from silk and such synthetic fibers as nylon. Cotton goods are especially important.

The paper industry produces 32,000 tons a year. Wood, rubber toys, notions and tires are widely produced; as well as packed foods—fruits, meat, fish and



## THE LONG, THIN COUNTRY

sea food. Chile makes fine wines, including champagne, also beer and spirits. Tobacco is produced only for domestic use. Natural mineral water is exported. Milk is pasteurized, and very good butter and cheese are made.

Chilean farms produce enough wheat, maize (corn), rice, potatoes, beans, hemp, fruit and wines to send considerable quantities abroad. The ocean waters and the streams of central and southern Chile yield a wealth of fish and sea food—trout, salmon, congrio, cod, mackerel—and the fisheries are being developed further.

Some 5,300 miles of railroad track, more than 5,000 miles of modern highway and more than 100 merchant ships connect distant cities by both water and land. Goods can be sent almost everywhere in the country, whether it is the nitrates of the north or the potatoes and sea food of the Isles of Chiloe.

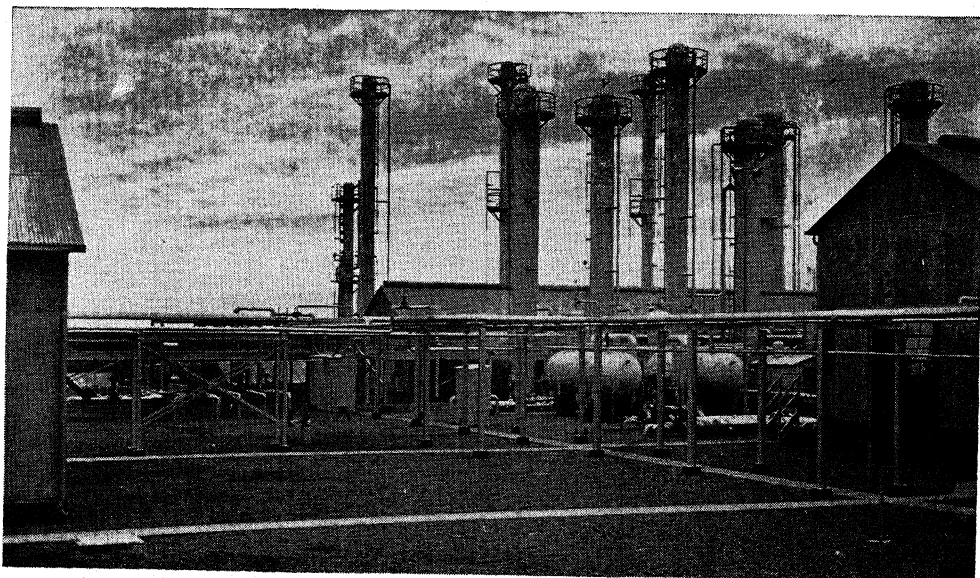
Chile's air traffic is provided for by the LAN (National Air Line) inside the country. International air transport to and from Chile is carried by Chilean, United States, French, Scandinavian, British, Argentinian and Dutch lines.

Chile owns a number of small islands

in the Pacific. Among these are the Isles of Juan Fernandez, about three hundred miles due west from Valparaiso. It was on one of these isles that the stranded sailor Alexander Selkirk lived. After his rescue he told his story to Defoe, in London, and the result was *Robinson Crusoe*. The tiny group is a paradise of trees and fields of ferns. The waters teem with lobsters.

Farther out—about two thousand miles from the coast—is Rapa-Nui, or Easter Island (Isla de Pascua). Here stand strange stone figures, carved by a race of Polynesian artists. It is possible that the figures are a link between the two sides of the great ocean. Some day there may be an airport on this island in the immensity of the Pacific, for hops between Chile and Australia.

Several navigation companies and the National Air Line reach even the far-away Antarctic continent. Under the control of the Chilean Navy, a weather station broadcasts reports to the Pacific coast of all South America. Several bases have been set up by the Chilean Navy, Army and Air Force in Antarctica, following earlier settlements by Chilean whale hunt-



THREE LIONS

**OIL-REFINERY TOWERS** are a symbol of a flourishing industry in Tierra del Fuego. Once the land seemed strange and remote, and only shepherds and lumbermen lived there.

ers. A new era of pioneering may be opening on the White Continent. It is probably rich in minerals and, in the future, may prove capable of supporting permanent colonists.

The visitor from non-Spanish-speaking lands usually finds that Chileans are able to speak his language. Moreover, they are familiar with his way of living at home. The hospitality of the Chileans is sincere, and strangers are greeted with warm, open smiles. Though his sense of humor is ever on tap, the Chilean's wit is kindly. He respects the feelings of others. Befitting a democratic country, there is tolerance of all religions and nationalities, provided the newcomer does not intrude on the Chileans' own.

Chile is progressive without being restless. Essentially the people are mountaineers, proud and generous, who yet are constantly aware of the sea. In a land that is not even fully explored as yet, they have built a stable and advanced nation.

BY CARLOS D. HAMILTON



ELIZABETH R. HIBBS

**A SPIRITED STATUE** of Bernardo O'Higgins, who led Chile's struggle for independence.

## CHILE: FACTS AND FIGURES

### THE COUNTRY

Bounded north by Peru, east by Bolivia and Argentina, south and west by the Pacific. Total area is 286,397 square miles; and the population is 5,932,292. Juan Fernandez Islands about 300 miles west (population about 400) and Easter Island in the Pacific 2,000 miles from Chile (area 45 square miles; population about 600) have become national parks of Chile.

### GOVERNMENT

Republic divided into 25 provinces. All provinces except 8 extend from the Pacific to the international boundary. By the constitution which came into force in 1925, legislative power is vested in a National Congress consisting of Senate (45 members) and Chamber of Deputies (1 representative for every 30,000 inhabitants or fraction of not less than 15,000). Executive power is vested in a president, assisted by a cabinet and elected by direct popular vote for 6 years.

### COMMERCE AND INDUSTRIES

Mining and agriculture are the chief industries. The country is divided into 4 zones—the arid zone in the north whence comes most of the world's supply of natural nitrate of soda, 90% of its iodine and 18% of its copper; agricultural zone in the center; the forest zone in the south; and the Atlantic zone in the extreme south. Other mineral deposits include gold, silver, cobalt, manganese, coal, salt, sulfur and iron ore. Agricultural products include cereals,

wine, fruit and vegetables. Stock-raising, dairy-farming and forestry are important industries. The chief exports are nitrate, copper, iodine, sheep's wool, fresh and frozen meat, barley, oats and beans; imports are iron and steel manufactures, sacks for nitrate, railway supplies and tools, vehicles, sugar, petroleum, chemicals, textiles.

### COMMUNICATIONS

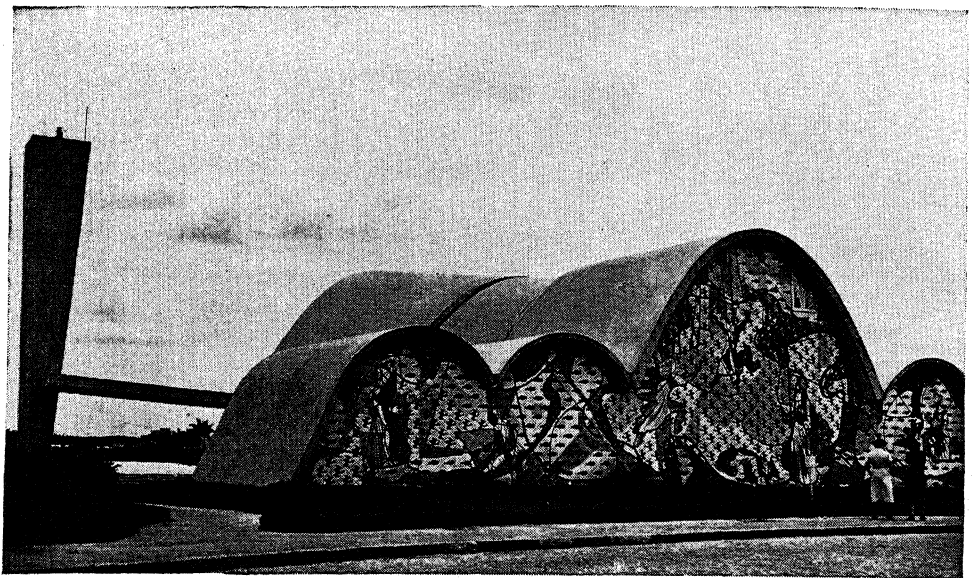
Length of railway lines, about 5,300 mi. Length of telegraph line, 17,000 mi.; automobile roads about 27,000 miles. There are 3 large broadcasting stations. Regular air service established between Santiago and Buenos Aires, from Santiago to Panama and North America.

### RELIGION AND EDUCATION

The Roman Catholic religion was maintained by the state until 1925 when it was disestablished. Education is free and compulsory for all children between the ages of 7 and 15. Primary school enrollment (public and private), about 207,000; secondary schools, 70,000. Besides special agricultural, mining and professional schools there are 4 universities. An unusually large number of foreign students attend them.

### CHIEF CITIES, WITH POPULATIONS

Santiago (capital), 1,161,633; Valparaiso, 522,273; Viña del Mar, 98,156; Concepcion, 87,620; Talca, 42,994; Antofagasta, 43,318; Chillan, 31,280; Punta Arenas, 24,706; La Serena, 23,130; Puerto Montt, 18,688.



**CHURCH AT PAMPULIA.** Its very strange and extreme-looking design is the work of the Brazilian architect Oscar Niemeyer, whose ideas are distinctly different.



PHOTOS, MOORE MC CORMACK LINES

**THE COCOA INSTITUTE** at Salvador, the port city for the Brazilian state of Bahia, is not far from the harbor. Ninety-five per cent of Brazil's cocoa crop is raised in Bahia.

# SOUTH AMERICAN GIANT

## Brazil—Land of Great Cities and Green Jungles

As a glance at the map shows, Brazil is the largest country in South America. The vast territory is divided politically into twenty states—hence the official name of the United States of Brazil—five federal territories and a federal district. Rio de Janeiro, the capital, is in the federal district. Within Brazil lies most of the Amazon Basin, much of which is still a wild and little-known jungle—one of the few frontiers left on earth, which in time may support a larger population than it has now. Yet in industrial development and many other aspects of modern life, Brazil is setting a pace for the rest of Latin America.

**B**RAZIL is a country in motion. Its people are restive and migratory. This is a noticeable trait even in agricultural methods. In the São Paulo-Parana area, vast *fazendas* (plantations) spread weedlike over the rolling hills of the interior, covering the rich red earth with the green carpet of the all-important coffee trees. Yet the slash-and-burn system of cultivation, which soon exhausts the soil, keeps the *fazendeiros* in pursuit of new land. In the Amazon area, there are no settled rubber plantations. Rather, the *seringueiros* (rubber gatherers) follow long roundabout tap lines through the dark jungles, here and there collecting the precious latex from the unsocial rubber trees.

People from the northeast periodically flee their homes when a *secca* (drought) strikes. A very bad one occurred in 1951-52. Hundreds of thousands of men, women and children deserted the sun-blasted area. Jammed into the backs of dilapidated trucks, they traveled for days to such southern centers as Rio de Janeiro and São Paulo. There the land was more hospitable and opportunity brighter even though the problems the refugees brought were not welcomed with enthusiasm.

Wealthy *fazendeiros* from Parana or industrialists from São Paulo or Rio de Janeiro find even the wide horizons of Brazil confining. Many spend part of the year in Europe or the United States.

This restlessness has historic roots. The Tupi Indians and related tribes—much less advanced than the progressive Indian civilizations in Peru, Central

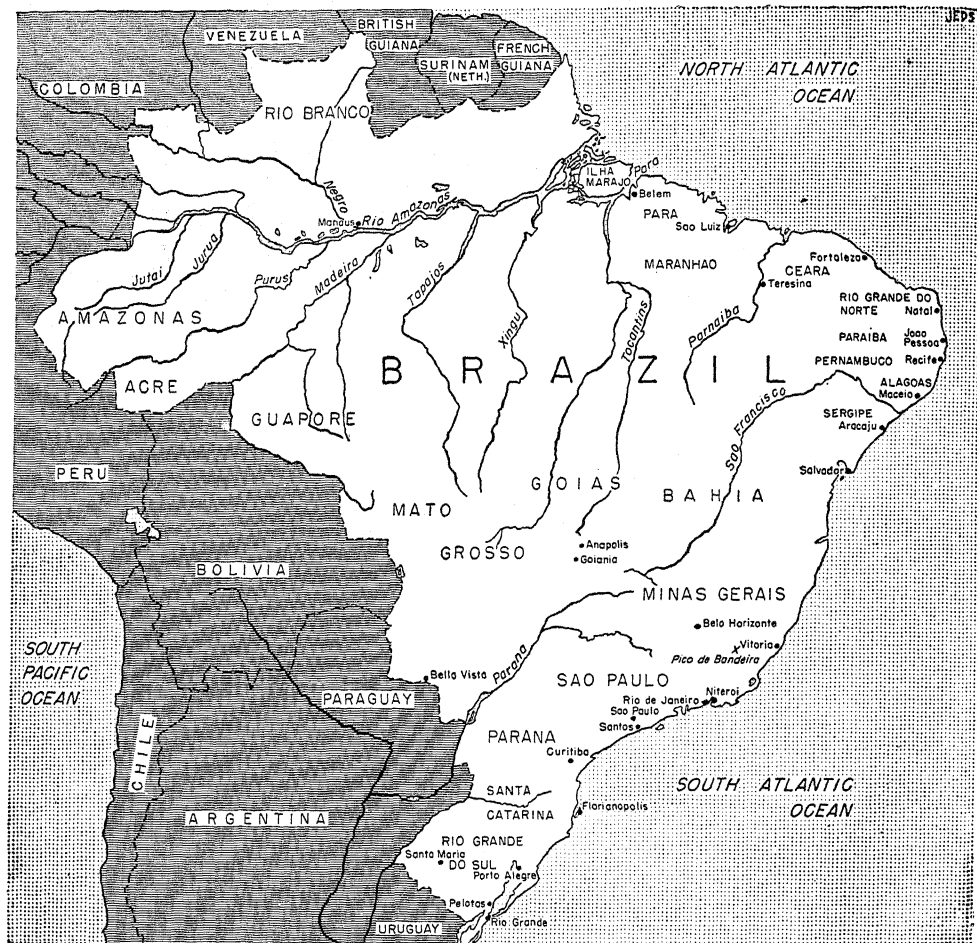
America or Mexico—were always wanderers in search of food over the vast face of Brazil. Early Portuguese settlers in São Paulo, envious of the more prosperous northeast, where sugar plantations were making fortunes for their owners, sent out numerous expeditions into the interior. These hardy *bandeirantes* helped push the boundaries of Brazil ever farther to the west in their hunt for gold and diamonds.

Rio and São Paulo are big, modern cities that reach back in time to the 1500's. Yet an hour or two's ride by air to the west brings you to booming new towns and cities that were populated only by anteaters, agoutis, tapirs, jaguars and peccaries—and an occasional hunter—as late as the 1920's.

Its very bigness and its store of untapped resources give Brazilians a solid conviction that their country will be one of the world's most important in the future. If there is more than a hint of impatience in the *brasileiro's* tone, you can set it down to the individual and national demand for progress.

In other sections of the country—the coastal north, for example—life follows a languid tropical pattern unvaried since sun first rose over a palm-arched strand. Deep behind the tropic shores, in the endless jungles of the Amazon, life is still hazardous, except for the Indian—ignorant of the ways of modern man but highly skilled in the matter of living in the face of numberless threats to existence down each jungle path or teeming river.

Brazil's vast area is occupied by only about 55,000,000 persons, and more than



THE VAST TRIANGLE OF BRAZIL AND ITS HEARTLINE, THE AMAZON

three-quarters of the population is found within a hundred miles of the coast. Yet Brazilians, who make up nearly half the people of South America, have been increasing at a phenomenal rate. Between 1920 and 1940 the population jumped 35 per cent. Nevertheless, there are still large areas very thinly populated, which contribute little or nothing to the national economy. Brazil offers great possibilities for pioneer settlement in a world where frontiers are almost a thing of the past. It has adopted in recent years more liberal immigration laws to encourage newcomers to share in the development.

Although only about 4 per cent of the national territory is used for agriculture and only about 19 per cent for pasture, it is estimated that something like 80 per

cent of the land could be productive. No other large nation in the world has anything like that proportion of useful area.

Under Brazil's red earth lie the raw materials for world industries of the future. In Minas Gerais there is a mountain range that has iron ore 70 per cent pure under the rugged heights. Not far away is one of the globe's largest deposits of manganese. Here and there throughout the land, bauxite, chromium, molybdenum, tin, tungsten, lead and zinc lie waiting to be dug out.

But nature, so lavish on one hand, is grudging on the other. The absence of coal that can be made into coke at low cost, for example, is a serious handicap in a land so rich in iron, gold and other ores. They cannot be refined without fuel.



## SOUTH AMERICAN GIANT

Mountains worthy of the name are few. Pico de Bandeira, lying a little northeast of Rio de Janeiro, is the highest elevation in the country. It is only 9,462 feet above sea level.

The Brazilian climate has few extremes, either of temperature or of moisture (except in the Amazon Valley). At the same time, it is not so monotonously uniform or so unbearably hot and damp that it deadens the human spirit.

Brazilians are frequently lumped together with the Spanish American inhabitants of the rest of the continent under the term "South Americans." While there are obviously common historic heritages, the Brazilians are a people apart.

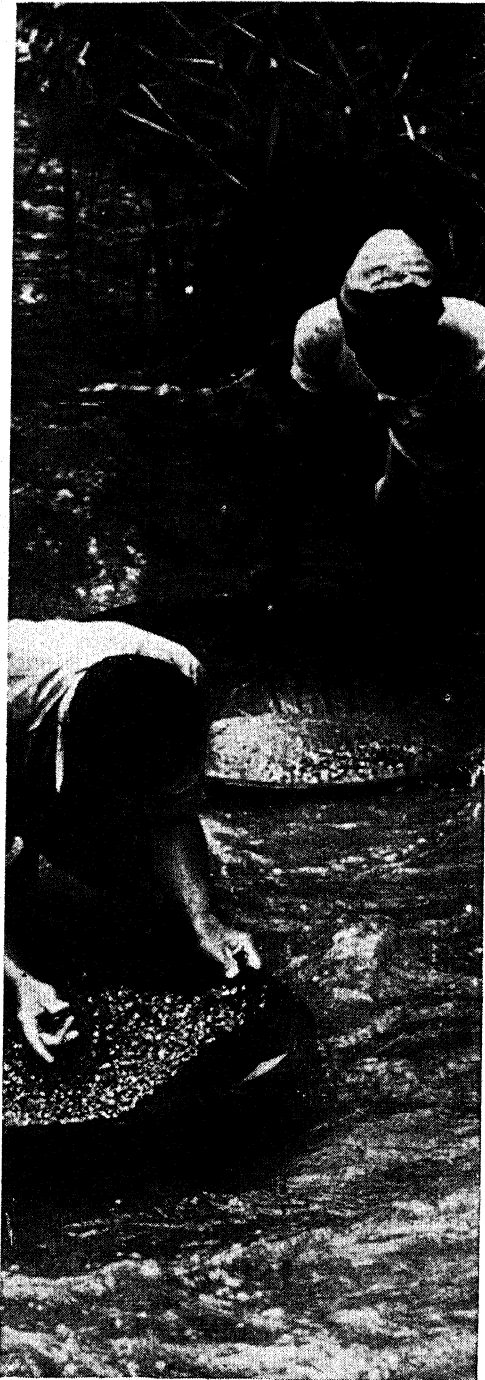
### *A Blend of Peoples*

Early chroniclers indicate that the Portuguese who first came to Brazil were a rather dour lot. The stolid Indians there were not noted for their sprightly humor either. Therefore, it is probable that the immense reservoirs of gaiety, humor and readiness for enjoyment found in the Brazilian today must be traced mainly to the infusion of Negro stock, with its good spirits and joy in life, into the mainstream of Brazilian life. Certainly no other people in the world enjoy themselves more ecstatically than the *cariocas* (residents of Rio) during carnival. Successive days and nights of parading, singing and dancing in the streets, with scarcely any letup, exhibit this side of Brazilian character.

In other parts of Latin America, revolutions frequently are deadly serious wars pitting man against brother with no quarter to the loser. In Brazil it's different. A *brasileiro* acquaintance once explained it this way:

"About twenty years ago," he said, "the state of São Paulo raised a revolution against the Government demanding certain reforms. There was a battle or two, the *paulistas* were defeated and things quieted down. But then the legislators thought: well, if these people really feel so strongly about these issues let's give them what they want anyway."

Although this anecdote oversimplifies, it does illustrate something of Brazilian



TRIANGLE

**DIAMONDS**, part of the wealth of the Amazon Basin, occur in the gravel of jungle rivers.

## SOUTH AMERICAN GIANT

character. In general, Brazilians dislike extreme or violent measures. They prefer to talk themselves out of a dilemma rather than resort to force.

Family feelings are deeply woven into the social pattern. Life centers within the family circle. With their Latin neighbors, Brazilians share a distrust of government, which for them exists somewhere beyond the pale of family and friends. Civic organizations and co-operative endeavors are relatively unimportant, although they do play a greater role in Brazil than in other South American countries.

To some North Americans, Brazilians seem improvident. They appear to be more interested in today's pleasures than in tomorrow's profit or security. No business is important enough to take precedence over enjoyments. A *cafezinho* (demitasse of strong coffee and sugar in about equal portions) interrupts almost any negotiation. Prompt appearance at a business appointment takes second place to a talk with a friend not seen for a long time. These traits, which contribute to

the *mañana* (or more properly, in Portuguese, *manhã*) attitude of putting things off to tomorrow, are frequently provoking to the high-voltage business visitor.

For some years after the territory was discovered in 1500, the Portuguese were few in Brazil. Even in 1600 a chronicler estimated that the total population of 57,000 was composed of only 25,000 whites, 18,000 civilized Indians and 14,000 Negro slaves.

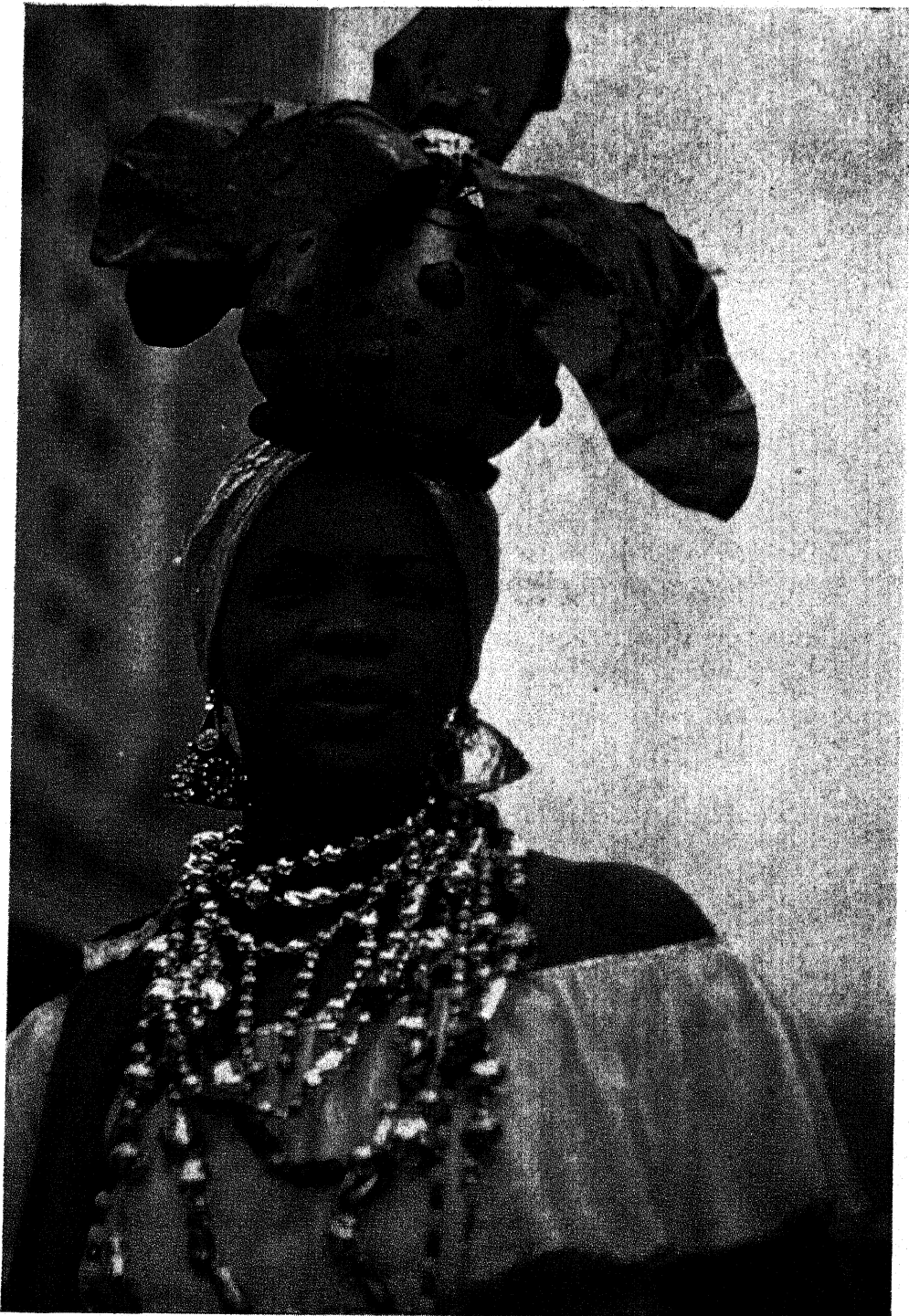
In those days little Portugal's big empire extended from the Amazon to the Far East. The human resources to control this vast area were limited; and in Brazil the Portuguese avoided conflict with the Indians as much as possible. Moreover, when the Portuguese tried to use the Indians for labor, they found that the Indians did not accept servitude lightly. If oppressed, they frequently disappeared silently into the jungle. The heavy work of the sugar, cotton and tobacco *fazendas* was not to their liking.

Hence the importation to this part of the New World, as elsewhere, of the Negro slave. In Brazil, however, he was not



MOORE MCCORMACK LINES

**OURO PRETO**, mountain town of Minas Gerais. In Portuguese, *ouro preto* means "black gold." The region is rich in a variety of minerals, and there was a gold rush around 1700.



CHARLES PERRY WEIMER

**DRESSED FOR CARNIVAL** in a jumble of necklaces, huge earrings and an amusing headdress that looks like a bowl with banana leaves sprouting from the top, placed over a turban.



TRIANGLE

**A SPACIOUS BUSINESS THOROUGHFARE** in Recife. On the easternmost point of the Brazilian bulge, the city is an important port, protected by a fifty-foot-wide reef.

merely a slave; he was the raw material for a new nation. The Portuguese quickly mixed with the newcomers and the Indians to form a new people.

This tolerance among the races still persists in the warp and woof of Brazilian life today. It can fairly be said that Brazil is making probably the most interesting experiment in racial mixture of any nation on earth. It is deliberate policy to absorb by intermarriage all the different peoples within its borders to form a new racial compound. The process is well advanced.

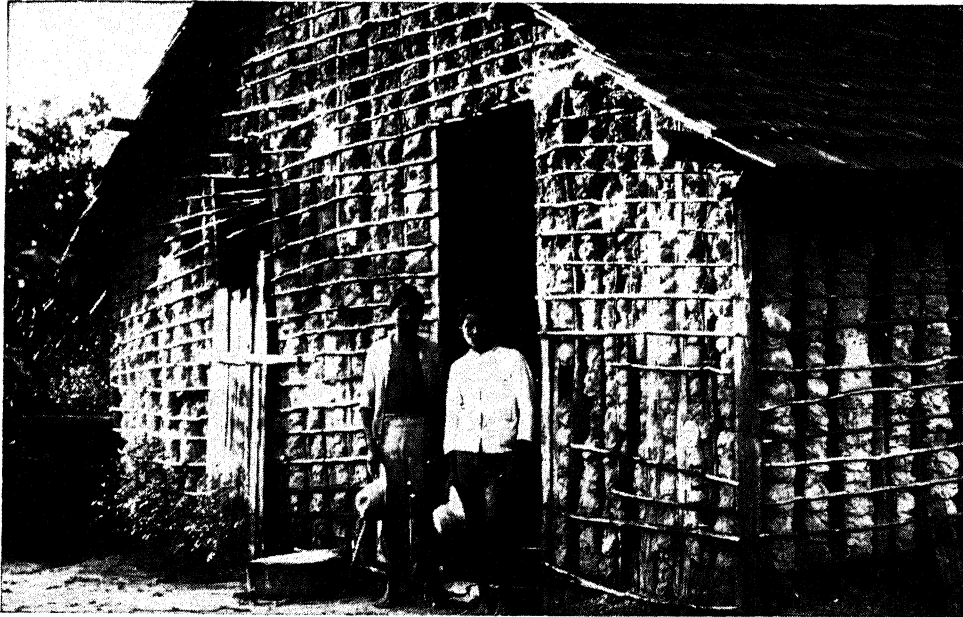
A certain racial pattern can nevertheless be traced in Brazil although not with absolute rigidity. Whites predominate in the southern states; Negroes and mulattoes in the central and northern coastal states; and Indians in the Amazon Basin. The whiteness of the population in the south is due to an inpouring of European immigration for decades. Italians are the biggest single group (32.6 per cent in a recent year) and Portuguese next (30.3 per cent). Others are Spaniards, Germans, Japanese and Russians.

The Amazon Basin (comprising more than a third of the entire country) is a section that is bound to play an increasingly important role in the future. Geologists say the river that drains this area was once an arm of the ocean from the Atlantic to the Pacific. Today it is a "moving sea" with more than 1,000 tributaries—ten of them larger than the Rhine River; several at least 1,000 miles long.

One branch, the Madeira, stretches for 3,000 miles and drains off the waters of 90 tributaries of its own. At flood time, the Amazon spreads out for hundreds of miles at some points, inundating thousands of square miles of forest land.

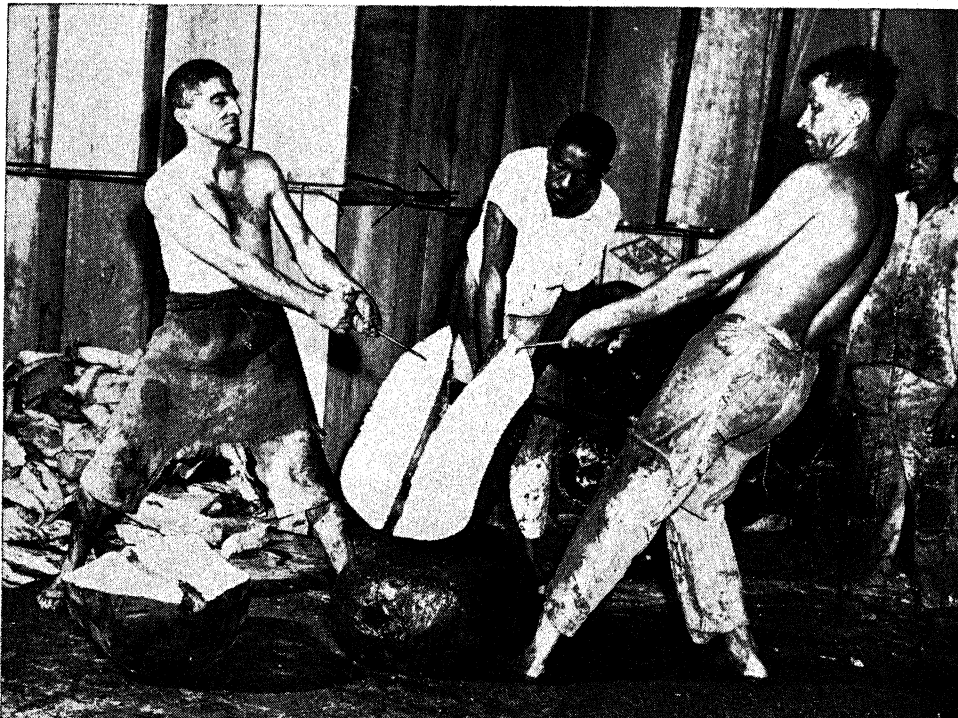
The river dominates an area of 3,000,000 square miles of territory, most of it covered with luxuriant virgin forests, or *selvas*. It is populated in many parts by less than one person per square mile. Rubber and gold booms have set man against the jungle in the past. But "busts" followed the booms and the jungle for the most part quickly reclaimed its own.

The riches of the Amazon Basin are



EWING GALLOWAY

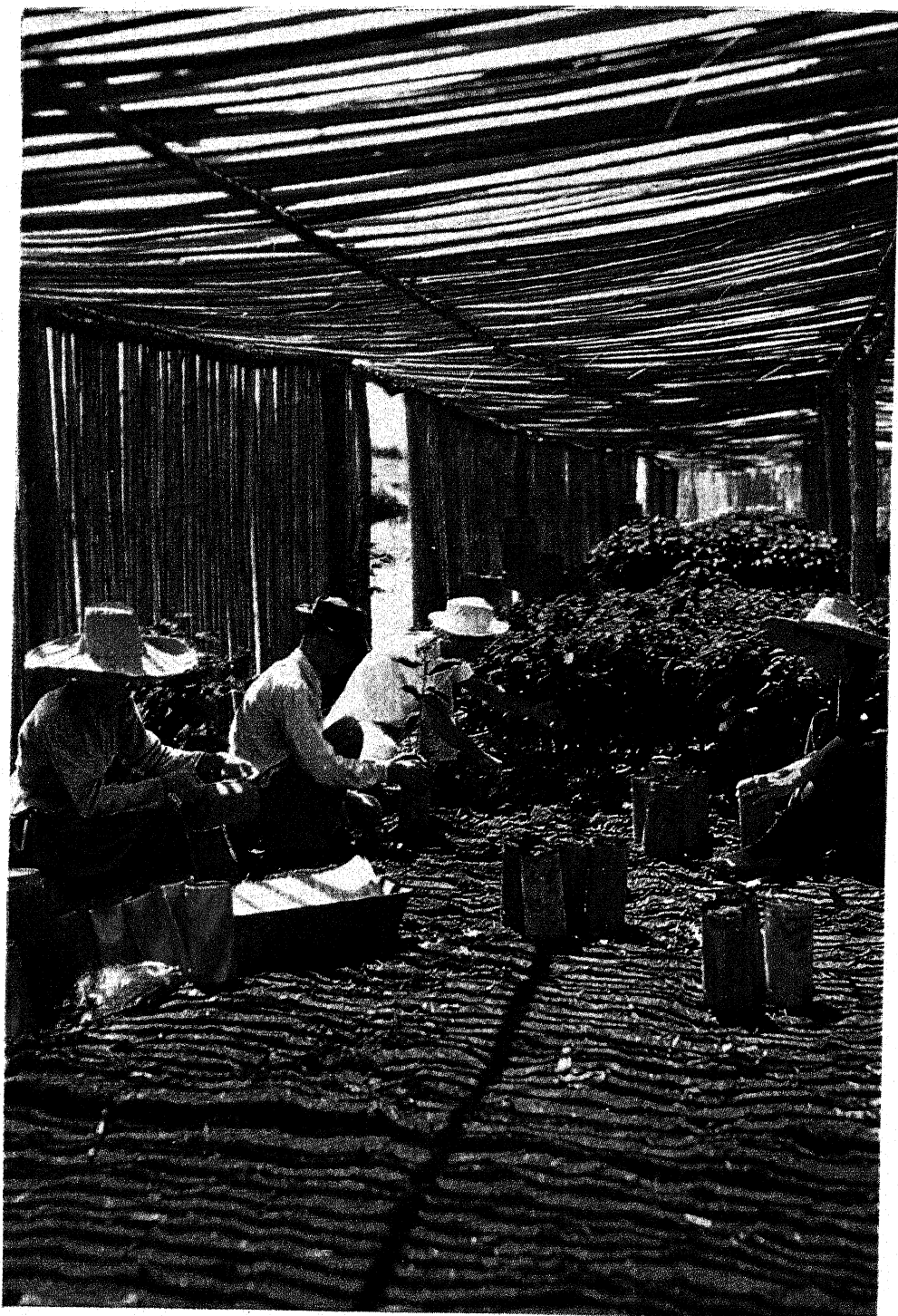
**BAMBOO STRIPS** filled in with mud fashion a home in the state of Para, in the lower valley of the Amazon. Though rough-looking, it suffices for shelter in the warm climate.



C.I.A.A.

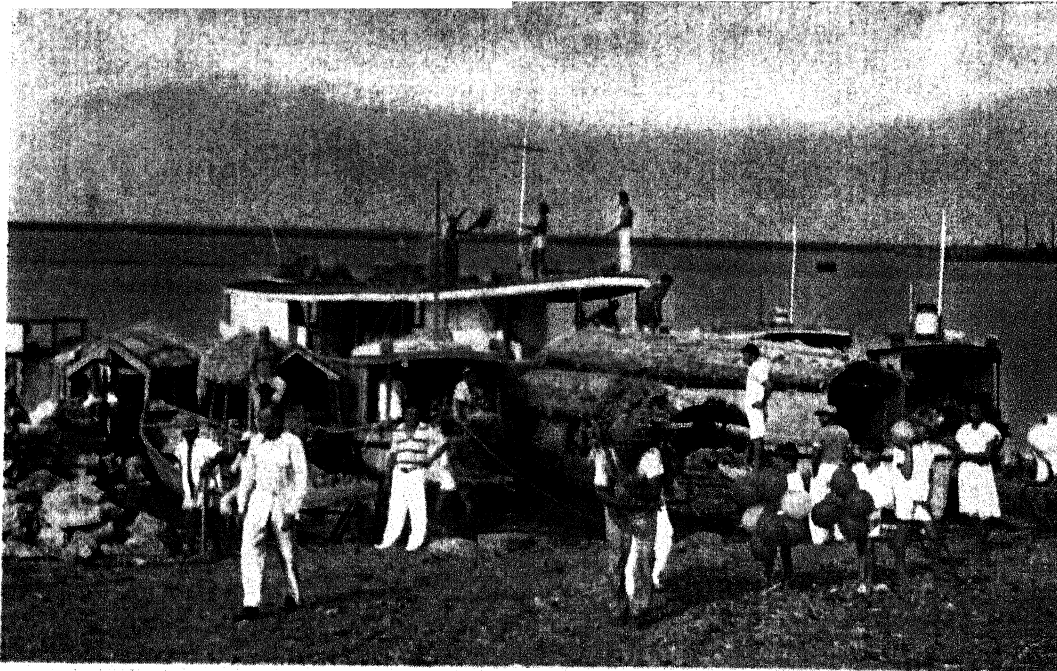
**A BALL OF NATURAL RUBBER** is pried apart in a Manaus warehouse. After the liquid latex is gathered from the trees, it hardens and the lumps must be cut up for grading and washing.





CAMERA CLIX

**IN AN AIRY SHED** coffee seedlings are carefully transplanted. The young trees need shade. After about three years, they will begin to bear fruit, the aromatic beans.

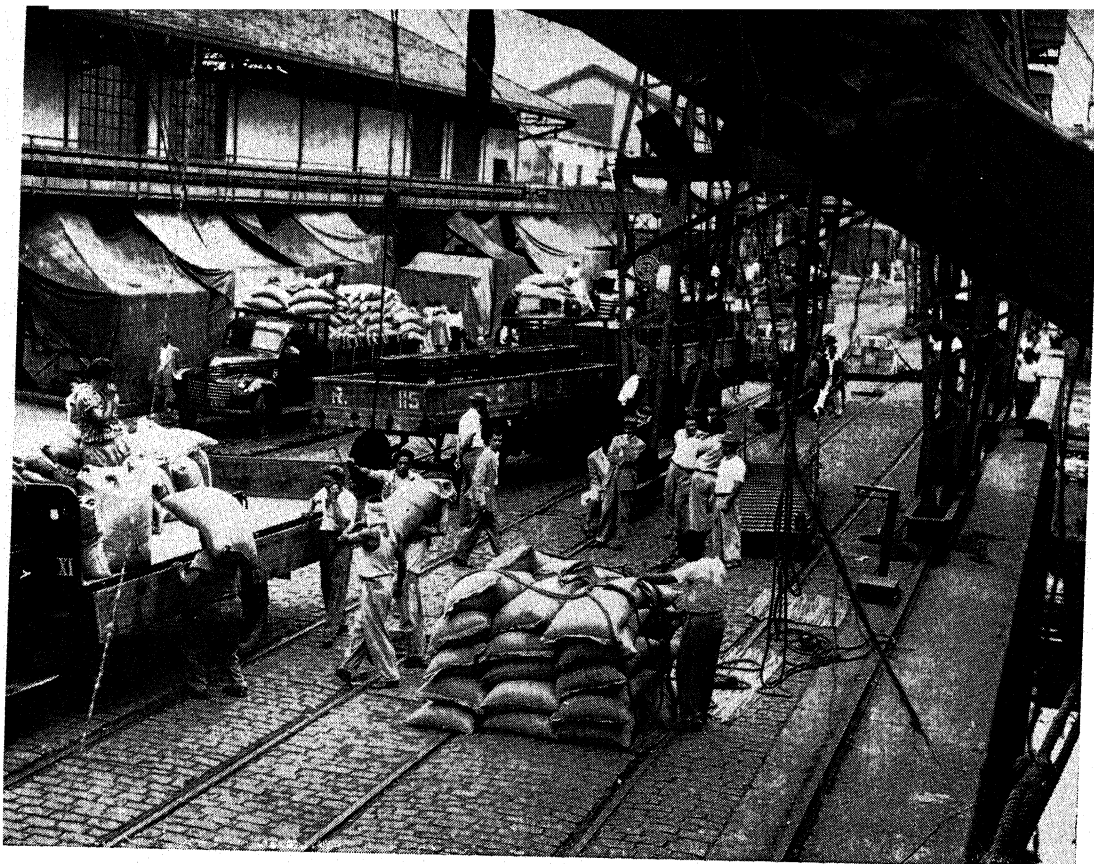


**RIPE FRUIT FOR SALE** along the river front at Manaus. Nearby are floating wharves, for steamers, that allow for a thirty-three-foot change in the water level of the river.



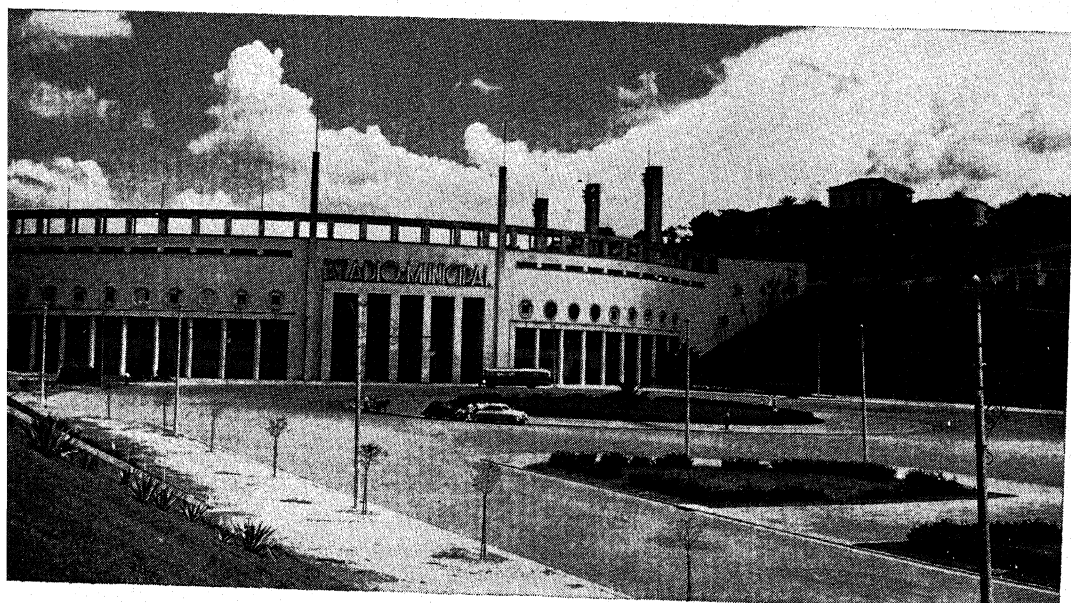
BOTH PHOTOS, RAPHO GUILLUMETTE

**BROAD AVENUES** shaded with spreading trees invite a stroll in Manaus. It has a luxurious opera house, dating from the rubber boom of the early 1900's, and a handsome cathedral.



MOORE MCCORMACK LINES

**DOCKS AT SÃO PAULO.** Bags of coffee beans are unloaded from trucks, ready to be shipped overseas. Coffee is Brazil's chief export and the greatest source of national income.



B.O.A.C.

**THE IMPRESSIVE ENTRANCE** to the municipal sports stadium in São Paulo. The huge open-air structure, with a large playing field, has a seating capacity of seventy thousand.

## SOUTH AMERICAN GIANT

still largely unexplored. It is known that manganese, precious and semiprecious stones, oil, fine cabinet woods, Brazil nuts, vegetable oils, and numerous plants used in drugs, dyes and other chemicals are there. But exploitation on a modern industrial scale is in its infancy.

There is some disagreement among experts as to the real value of Amazonia. Some say it could accommodate as many as a billion people or feed the entire population of the globe. Others contend that the soil under the broad-leaved roof of the jungle is of poor, sandy quality and not suitable for supporting large numbers of people. Further research will be necessary to finally determine the facts. However, the Brazilian Government has begun a long-range program of development of the area, to improve transportation, encourage migratory residents to stay put in cities and towns to help build up the area, and to investigate those agricultural products and industries that are suitable for the special conditions existing there.

Cities such as Goiania and Anapolis have sprung from jungle clearings. Preventive health measures, cutting down the ravages of malaria and other tropical diseases, are slowly making Amazonia easier to live in.

The city of São Paulo is the most representative of the rapid tempo of modern Brazil. Described as a "Chicago with palms," it has much the same atmosphere as the North American West in the late 1800's. São Paulo is youthful, vigorous, filled with visions. In spite of its much-vaunted four hundred years of history, its amazing industrial boom has occurred only since the 1920's. Today it lays claim to being the industrial capital of Latin America and the world's fastest growing city.

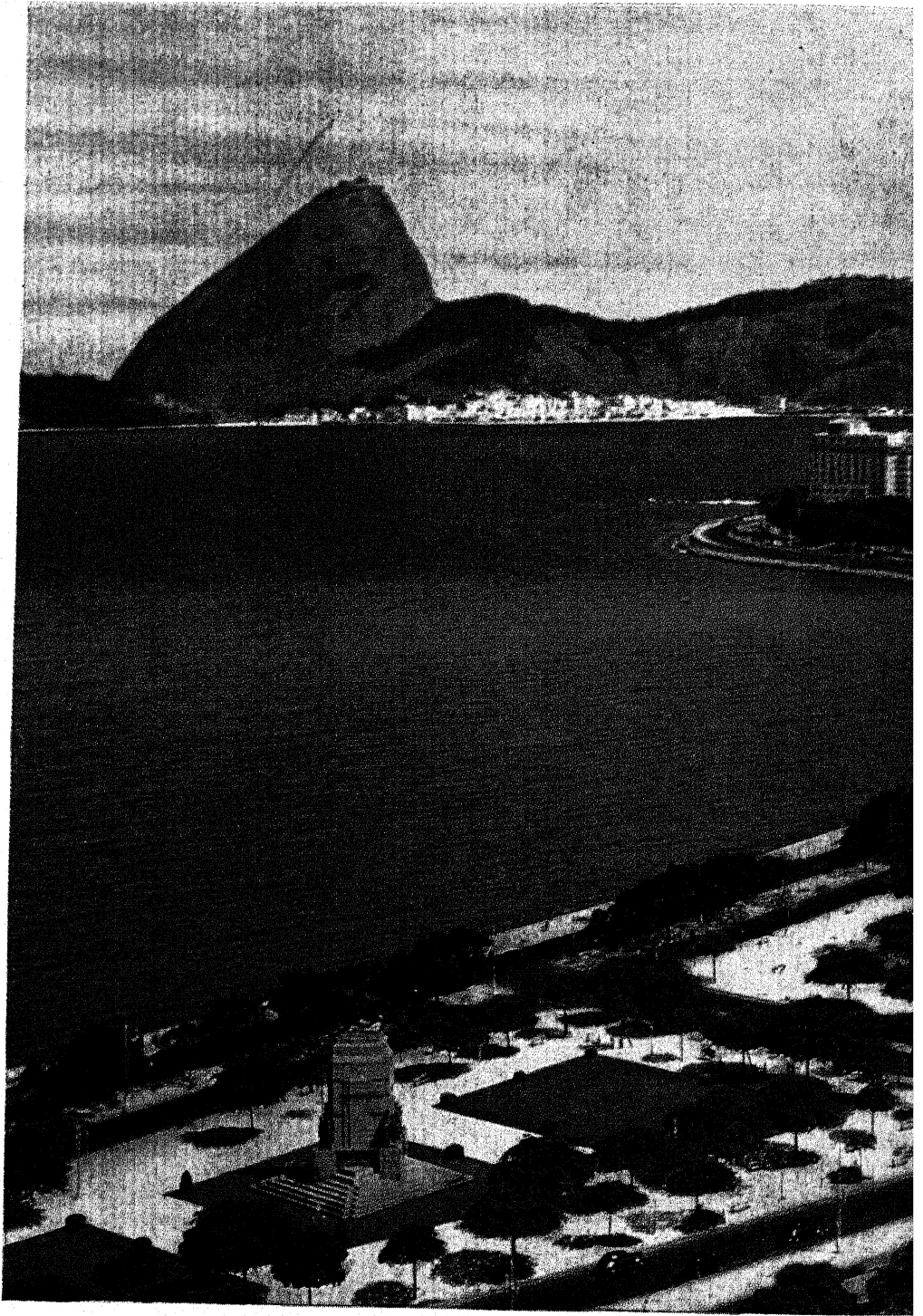
*Paulistas* are filled with pride in their city and state. They refer to the state as the "locomotive pulling nineteen empty wagons" (the other states). They are anxious to impress—as if the mad pace of the city, its snarled traffic, bustling crowds



TRIANGLE

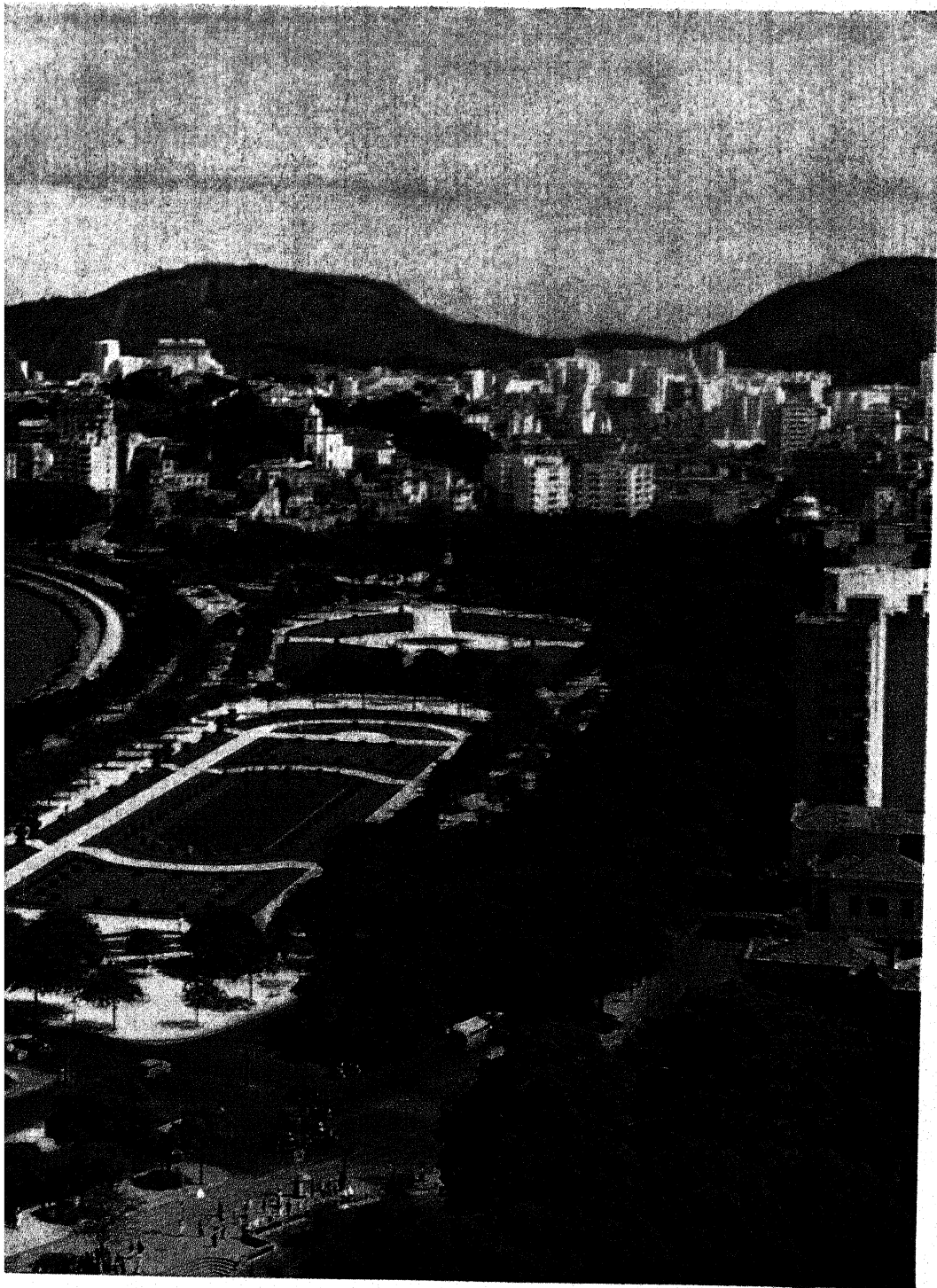
**FEATHER HEADDRESSES** adorn Bororo dancers. These Indians, among the tallest in all South America, live on the upper reaches of the Paraguay River, in the state of Mato Grosso.





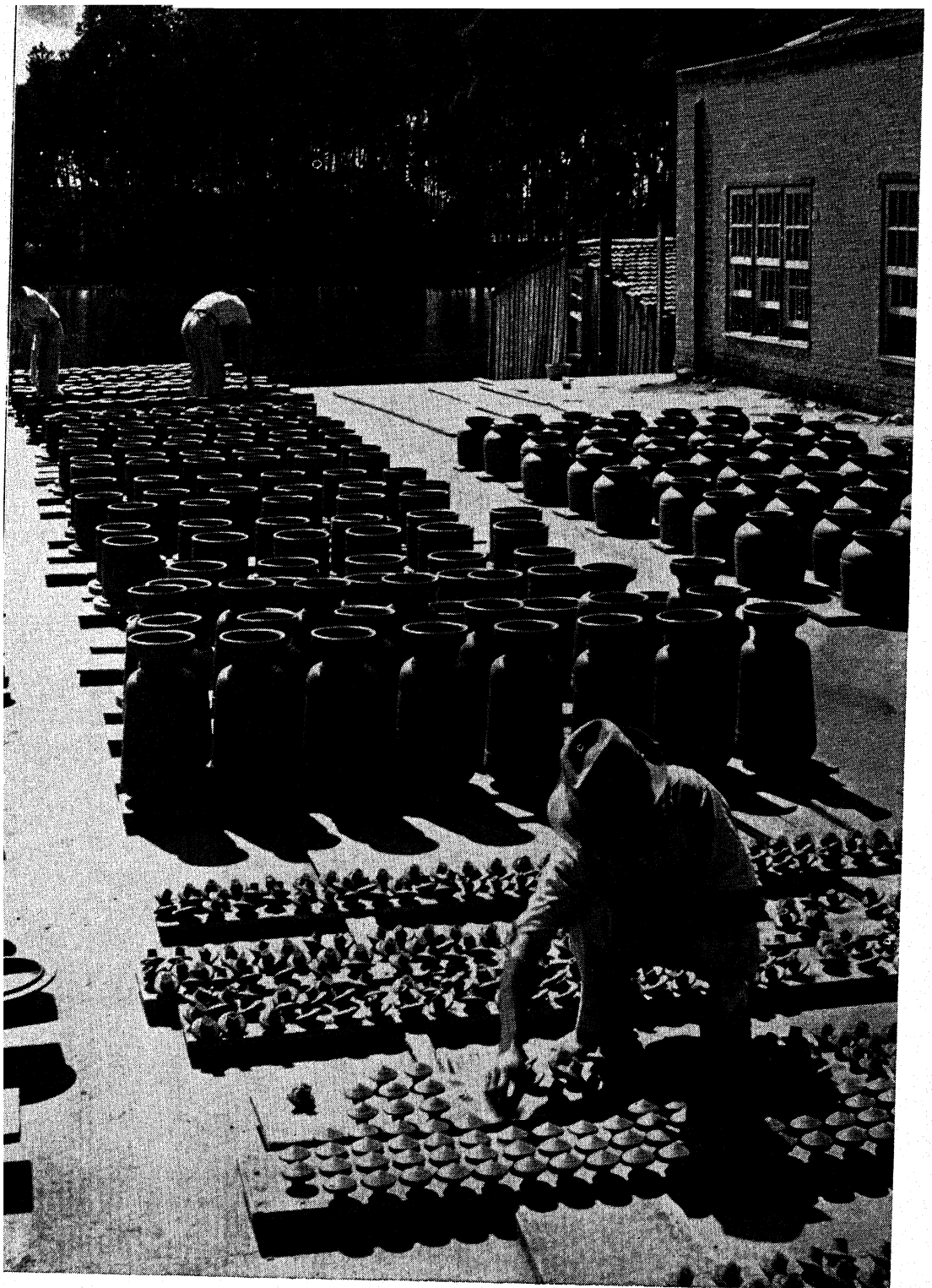
**THE MAGNIFICENT SWEEP** of the harbor of Rio de Janeiro. This stretch is from the Praça Paris—bayshore gardens—to the famous landmark, Sugar Loaf Mountain. To the right, towering





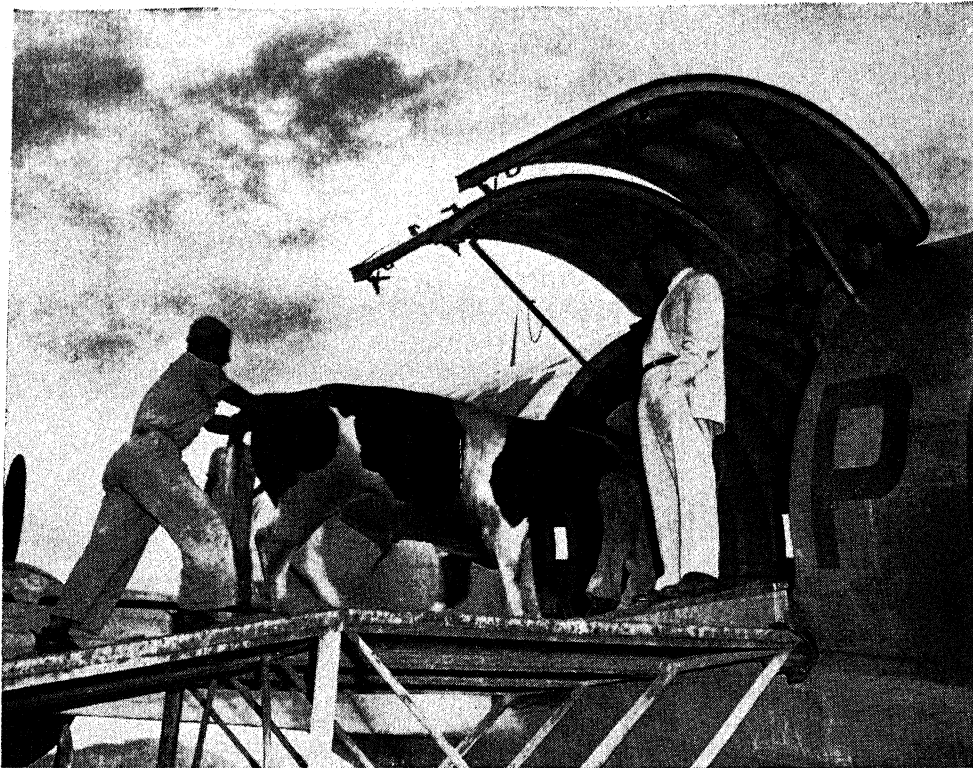
skyscrapers mark the location of Avenida Presidente Vargas. The harbor is landlocked, and along two miles of wharves ocean-going vessels may berth almost in the city's center.

CAMERA CLIX



PAN AMERICAN WORLD AIRWAYS

**FINISHING TOUCHES** are put on an array of jars, and their stoppers, at a pottery factory in São Paulo. The bustling city is home for a large number of industries.



UNATIONS

**PRIZE CATTLE** being shipped by plane from the Santos Dumont airport. In an effort to improve stock in the interior, prize animals are flown in for breeding purposes.

and ever present skeletons of skyscrapers being erected were not enough.

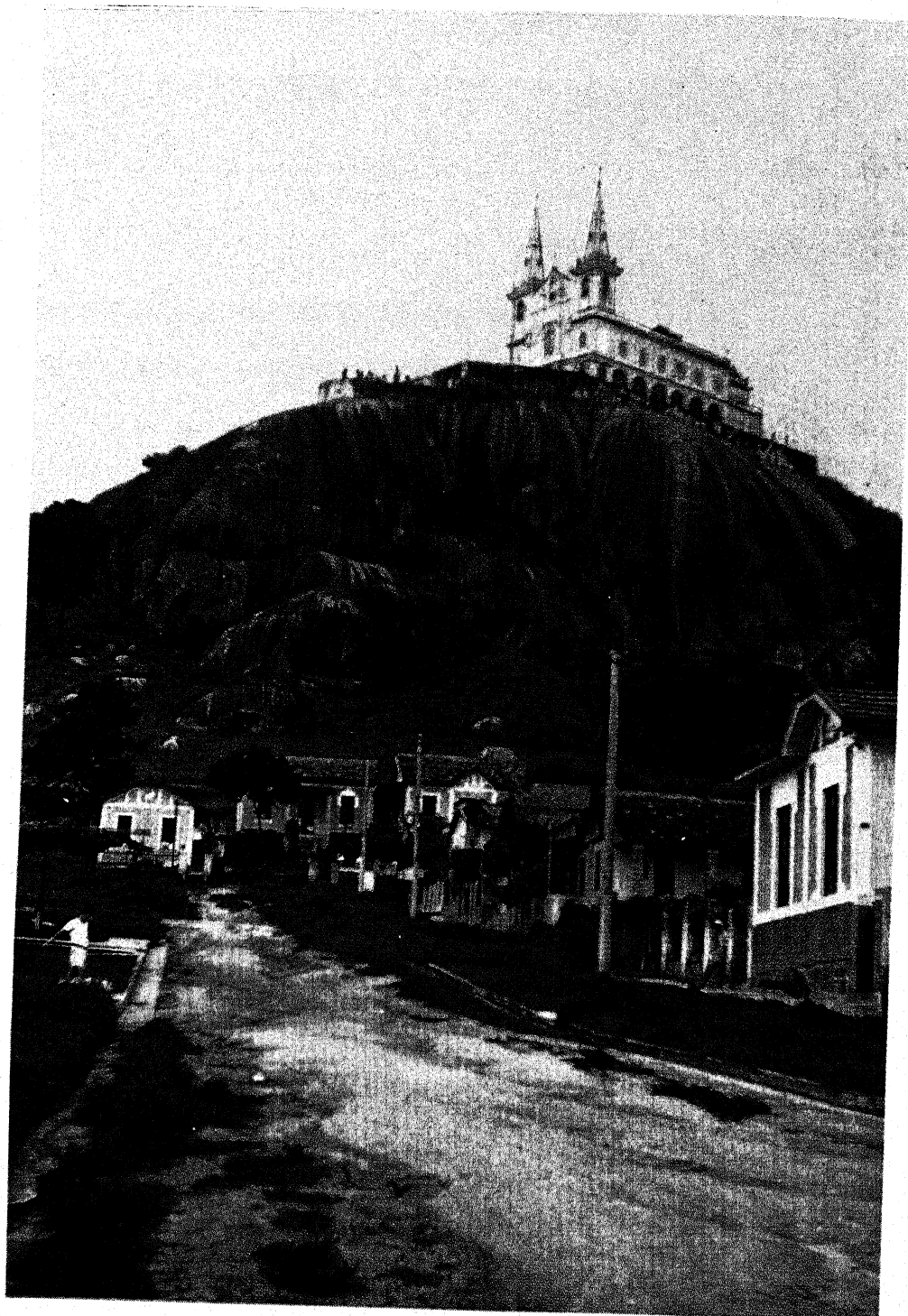
The shortage of electricity illustrates the difficulty the city has in keeping pace with its physical growth. Most of the time you can plan on when the current is to be on or off. But occasionally you forget or can't make an appointment at the right time. Then you wish São Paulo weren't built so vertically. The writer has had to walk up eleven floors of an office building because the elevators were shut down between 8 A.M. and 1 P.M.

São Paulo is a melting pot. In the faces of its citizens one can see Japanese, Italian, German, Polish and other ethnic traits. The Italians have made an outstanding contribution. The Matarazzo family, which heads an industrial empire (sugar, soap, metallurgy, cotton, oil and so forth), is descended from a humble Italian immigrant who came over as a farm worker.

Coffee and Brazil are synonymous terms. Although the country is the second largest producer of cacao and exports considerable quantities of sugar, oranges, hides and skins, cotton, diamonds and nuts, coffee is undisputed king. It is easily the greatest source of national income and the chief export.

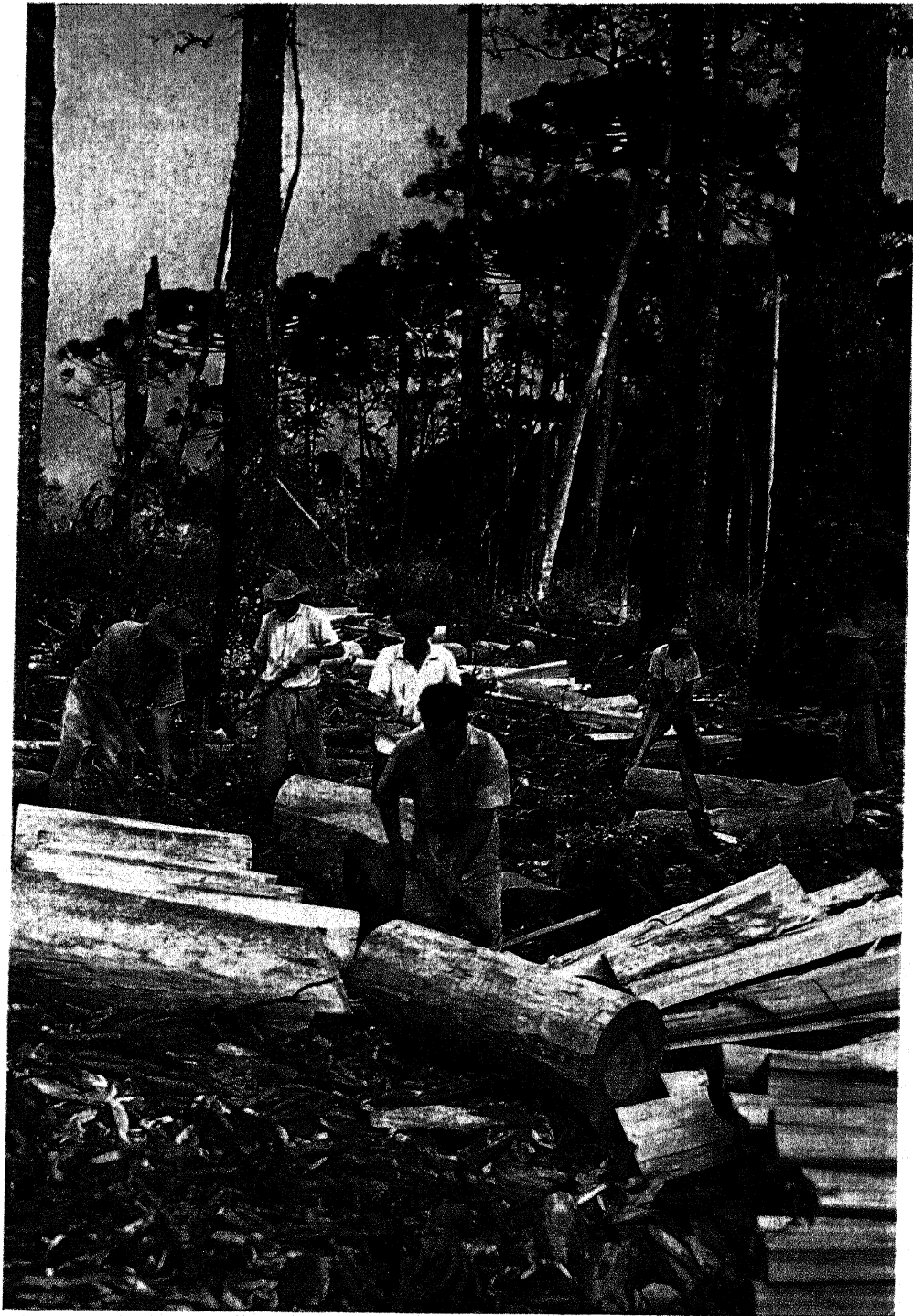
Brazil grows 58 per cent of the world's supply, mainly for consumption in the United States (which takes about 70 per cent of Brazil's exports) and European markets. Coffee is grown over large areas of the country, but nearly half the exports come from São Paulo state. Minas Gerais and Parana also are heavy producers.

Brazilian soils and climate seem especially adapted for luxuriant yields of coffee. To start a *fazenda*, the owner leases the land to a *colono* (tenant) to clear the forest and plant the coffee. During the four to six years it takes before the plants



CHARLES PERRY WEIMER

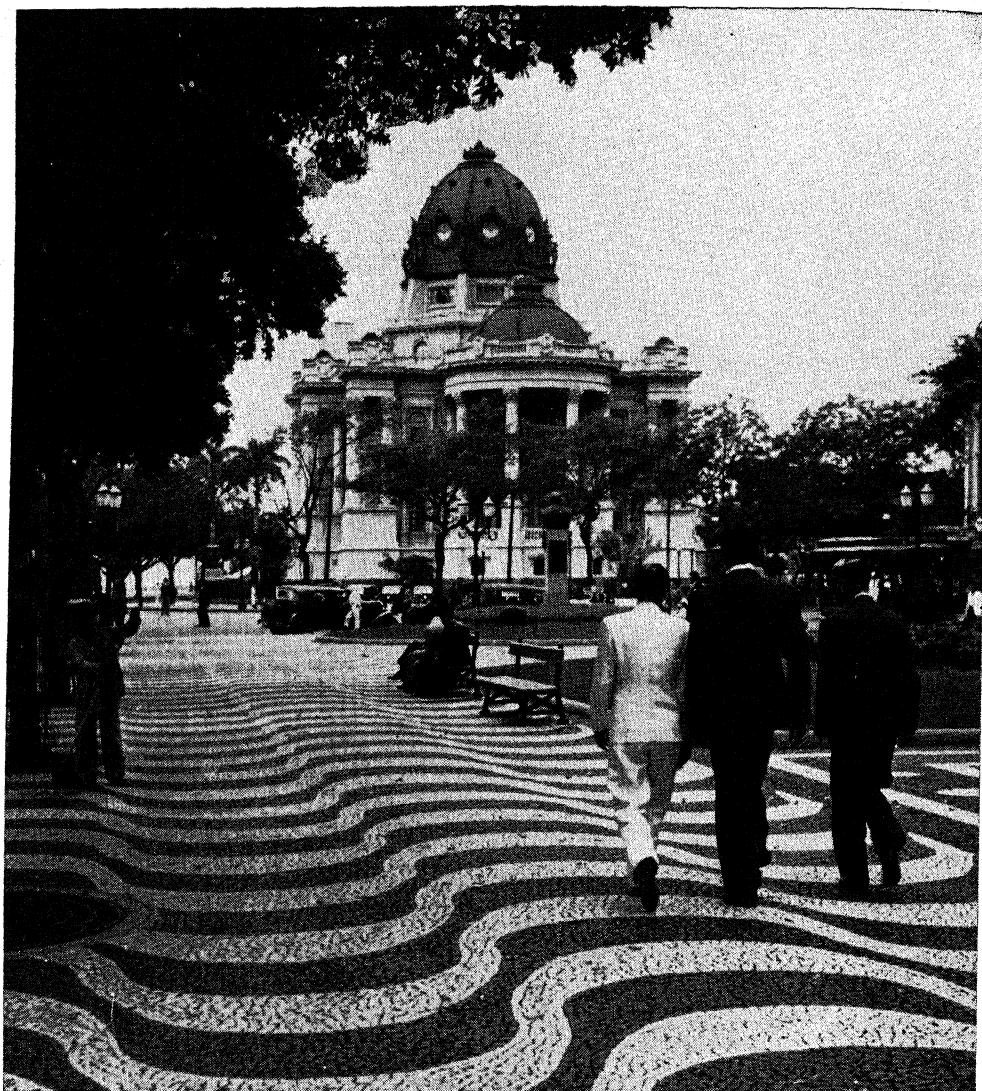
**CHURCH OF OUR LADY OF PENHA.** To reach the spired church at the top of the cliff, one must climb 365 steps, one for each day of the year. Penha is a suburb of Rio de Janeiro.



CAMERA CLIX

**LOGGING OPERATIONS** in the southern state of Parana. Its greatest natural wealth consists of timber, especially the fine stands of Parana pine that cover an extensive area.





PHILIP GENDREAU

**AVENIDA RIO BRANCO** in Rio de Janeiro, looking toward the Monroe Palace. Rio has a number of these handsome streets of mosaic tile, each a different black-and-white pattern.

will bear, the *colono's* family grows its food—rice, maize and beans are the usual staples—between the rows. The coffee trees are planted up and down the ridges and slopes of the rolling country. Valley bottoms may be avoided because the occasional dreaded *geada* (frost) wreaks its greatest havoc there.

When the trees begin to bear, the *colono* usually moves on; and the owner, his overseers and workers move in. Often villages are created, which have stor-

age sheds, drying platforms, husking and sorting machines, homes for the owner and workers, a church, stores and so on.

In the southern areas, the berries ripen in May or June and harvesting continues through August. The berries are stripped from the trees and thrown into tanks of water to clean them and separate the ripe from the green. They are then spread out on drying platforms, usually made of black tile to absorb the sun's rays. The beans are raked frequently until dry.

## SOUTH AMERICAN GIANT

Then they go into a machine that removes the husks and into other machines that grade them according to shape and size. The coffee is then bagged (each bag weighs some 125 pounds) ready for storage or shipment.

As we mentioned at the beginning of this article, *fazendeiros* have followed the practice of moving on to new land when the coffee trees have exhausted the soil. However, efforts are being made to introduce modern methods of agriculture and soil renewal that will permit *fazendeiros* to be more stationary and get greater yields.

Industrially, great changes have taken place in many other parts of Brazil as well as in São Paulo. Two world wars forced the country to fashion for itself what it could no longer secure abroad, and this led to an expansion of manufacturing.

### *Growing Industries*

Five industries account for the bulk of Brazil's production—textiles, foodstuffs, chemicals, metal processing, and construction. The country has a large cement industry, a modern steel plant, ceramics works, refrigerator, automobile, paper and pharmaceutical plants which make it the major industrial country of Latin America. Nearly all production is consumed on the home market. Only small quantities of textiles are exported.

Factories, unions, higher wages, better living standards are all helping slowly to change the face of Brazil. They offer hope of balancing the country's economy, which is so abnormally tilted in the direction of coffee.

Yet with all the abundance of field and factory there is lack in Brazil. This poverty amid plenty is rooted deep in history. Portuguese overlords early sought to establish in colonial Brazil only those activities that would add to the wealth of the court and merchants of Portugal. Economic feudalism fixed its mold on the country. This included the *latifundio* system, in which great land holdings were worked by slaves or tenants.

Colonials were restricted to the production of cheap raw materials, particularly

the "slave crops" of sugar and cotton. Expensive finished goods had to be purchased from the mother country. This enriched Portugal but fastened on Brazil economic shackles that only today are being hammered off.

### *When One Product Was King*

The *latifundio* system also encouraged excessive dependence on one or a few products. Resistance to change in this pattern brought about a series of crises. Brazil's economic history can be shown graphically as a roller coaster of "busts" and booms. Successive eras enthroned cotton, cacao, rubber, coffee (which at times has been burned by the tons because of low world prices) and gold.

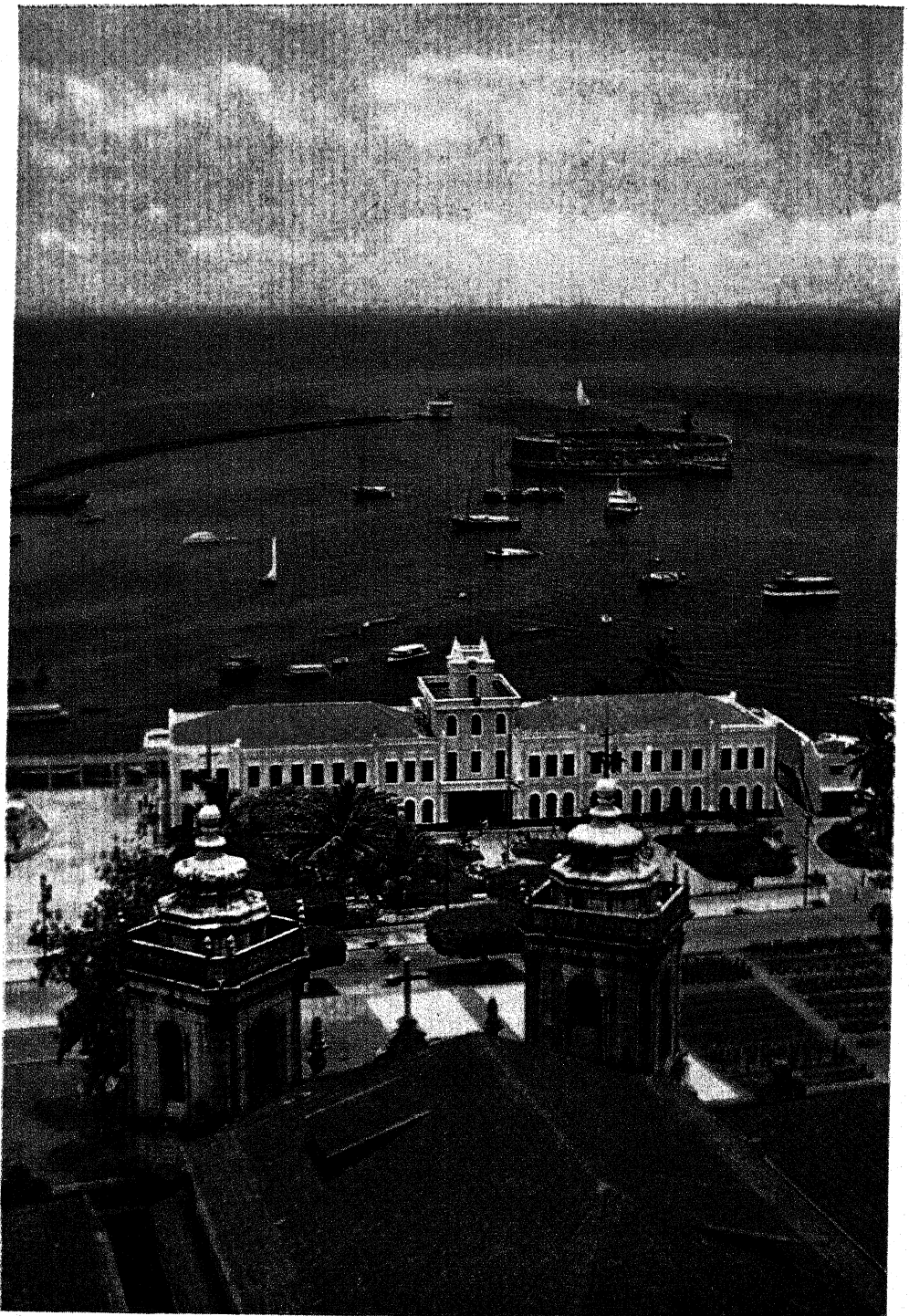
Moving into the second half of the twentieth century, Brazil has struggled from one economic crisis to another, battling inflation, currency difficulties, falling world demand for her products—as well as attempting to break the rigid patterns of the past.

Brazil was discovered by Pedro Alves Cabral in 1500. The first settlement was at Salvador de Bahia, where wealthy landowners brought with them their feudal traditions of great estates. During the latter half of the sixteenth century and all of the seventeenth, they made the states of Bahia, Pernambuco and Paraíba the world's prime source of sugar.

Despite their small numbers at first, the Portuguese were able to fend off attempts of the British and French to take over part of the colony. However, the major reason for the Portuguese success probably was that more tempting prizes for their foes lay elsewhere.

### *An Independent Empire*

After three hundred years of comparatively easy-going colonial life, Brazil, under the leadership of Dom Pedro I, declared its independence from the homeland, in 1821. Dom Pedro was proclaimed constitutional emperor of Brazil later that year. Faced with major difficulties, which included the loss of Uruguay, and as the direct result of a military revolt, Dom Pedro I abdicated in 1831. His five-year-



CHARLES PERRY WEIMER

**LOOKING DOWN** on the harbor from the heights of Salvador (formerly Bahia). The port is laid out on a tongue of land between the open Atlantic Ocean and Todos os Santos Bay.

## SOUTH AMERICAN GIANT

old son, Dom Pedro II, was left in the hands of a regent. The reign of Dom Pedro II, which began when he was only fifteen, was the golden age of Brazil. This ruler was wise, liberal and tolerant. He promoted education, increased communications, encouraged agriculture, suppressed corruption, stimulated immigration. In 1888 he ended slavery. This move cost him his crown. Many *fazendeiros* who had been given no compensation for the loss of their slaves were ruined. They turned on the Emperor, and he and his family were banished in 1889.

The monarchy was followed by what is known as the Old Republic (1889-1930). It was a period of comparatively uneventful progress and expansion. However, 1930 was a turning point. A revolution, headed by Getulio Vargas, governor of

Rio Grande do Sul, deposed the President. Vargas came into control of the nation. He was dictator-president until October 1945, when he was forced to resign by the military. Nevertheless, he was elected president again in 1950. Four years later, beset by economic and political problems, Vargas was again forced to resign. Immediately thereafter he dramatically committed suicide.

In the past, the wide sweeping land of Brazil has been referred to as a "sleeping giant." Today the giant is astir, ambitious, yearning for better things, trying its muscles. The basic raw materials—material and human—appear to be present for the evolution of a truly great country. Brazilians recognize this. It remains to be seen how well they rise to the challenge.

BY ROBERT M. HALLETT

### BRAZIL: FACTS AND FIGURES

#### THE COUNTRY

Bounded north by Colombia, Venezuela and the Guianas; northeast, east and southeast by the Atlantic; south by Uruguay, Paraguay, and Bolivia; west by Argentina, Paraguay, Bolivia, Peru and Colombia. The area is 3,287,190 square miles; population is given as 54,660,000. Fernando de Noronha, Rocas and small islands, over 150 mi. off the northeastern coast, belong to Brazil.

#### GOVERNMENT

Brazil (ESTADOS UNIDOS DO BRASIL) consists of 20 states, 5 federal territories and 1 federal district. The government was reorganized in 1946 and a new constitution promulgated. The constitution set up a Congress of two houses, the senators being elected for 8 years, the deputies for four years, and the president and vice-president for 5 years. Freedom of press limited: war propaganda, dissemination of race prejudice, and subversive doctrines proscribed; Communist Party outlawed. Voting compulsory for men and employed women between 18 and 65; optional for other literates over 65, unemployed women and officers of the armed forces.

#### COMMERCE AND INDUSTRY

Besides being the world's largest coffee grower, Brazil produces and exports vast quantities of cotton, cocoa, sugar, tobacco, rice, castor beans, oranges, bananas, pineapples, wheat and rubber. Leading imports include machinery, fuel, iron and steel manufactures, and flour. Principal minerals: gold, mica, nickel, quartz,

tantalite, titanium, magnesite, zirconium, beryllium, tungsten and graphite. Country has 110,000,000 head of livestock; and 15 large ports. The most important manufacturing industry in Brazil is cotton weaving, which employs about 25% of all factory workers. The Republic has developed some of its enormous hydroelectric power. The possible capacity is estimated as the fourth largest among nations. Brazil is the only Latin American nation speaking Portuguese.

#### COMMUNICATIONS

Railway mileage is about 22,880 and largely state-owned; length of telegraph wire exceeds 80,000 miles; of telephone line, approximately 700,000 miles. The Republic also has at least 300 broadcasting stations; and its airports are used by some 30 national and international airlines which connect the country with its chief cities, Africa and the United States.

#### RELIGION AND EDUCATION

Although most of its people are Catholic, absolute religious freedom is guaranteed. Education is free and compulsory in 78,340 public schools with 5,175,887 pupils. There are also 1,993 high and 3,186 special schools, 435 superior schools and 8 official universities.

#### CHIEF TOWNS

Rio de Janeiro, capital, 2,303,063; São Paulo, 2,017,025; Recife, 512,370; Salvador, 389,422; Porto Alegre, 375,049; Belo Horizonte, 338,585; Belem, 225,218; Fortaleza, 205,052; Niteroi, 170,868; Curitiba, 138,178.



EWING GALLOWAY

AN INDIAN WOMAN of the Chaco spins thread beside a tanned rhea skin spread out to dry. The skin has been treated with tannic acid, product of the quebracho (ax-breaker) tree.



# PARAGUAY

## Where Yerba Mate and Quebracho Grow

By twentieth-century standards, most of the Paraguayans are very poor. Time and again they have suffered some of the most cruel wars known to history. Less than a century ago, the most terrible of these conflicts wiped out more than half the population. The bravery of the soldiers of that day has become a legend. Since then Paraguay has been struggling to catch up with the rest of the world. There are still handicaps, chiefly the country's inland position and continued political restlessness. On the other hand, Paraguay has excellent natural resources, waiting on further development.

PARAGUAY is the only South American country except Bolivia that has no seacoast. Goods must be shipped out, by way of the Parana and Paraguay rivers, through the seaports of other nations. Or if exports are sent out by land they must cross foreign soil. This situation is a severe handicap in reaching world markets. Offsetting it to some extent is the fact that in addition to the use of the Parana and Paraguay rivers, Paraguay is permitted free access to a part of the port of Buenos Aires. Besides its effects on commerce, the inland position limits both communication with the rest of the world and the country's independence. Paraguay is forced to rely on the good will of its neighbors.

The Paraguay River, coming down from the north, divides the country into two distinct regions; the fertile eastern section, where most of the people live, and the Chaco, on the west, a good part of which is still wild. The Paraguay also serves as the border with Argentina in the stretch between Asuncion and the point where it joins the Parana River. Flowing down from the northeast, the Parana marks part of the boundary with Brazil and Argentina. On the west, the Pilcomayo River, a branch of the Paraguay, separates the Chaco from Argentina. These three rivers have many tributaries, some small and some large, which traverse Paraguay, providing excellent irrigation.

The Chaco is mostly a low swampy area, with many lakes and considerably more rainfall than the eastern region, though there is no severe lack of water

anywhere. The eastern half is rolling country, with hills as high as about 1,550 feet. On the well-watered pastures in quiet valleys, cattle thrive at very low cost.

The Tropic of Capricorn passes through Paraguay, so that part of the country is in the tropical zone. In general the climate is warm though it varies depending on the winds. The *sando* from the north is hot and the *pampero* from the south is cold. At the same time the temperature can change remarkably in the course of twenty-four hours. There are often heavy dews at night which chill the land.

The rich soil yields products of great value, such as orange trees, which are always heavily laden with fruit. In fact, Paraguay furnishes about three-quarters of the world's supply of petitgrain (bitter oranges) used in perfumes and flavorings. Guava trees, banana trees, yerba mate and many other plants flourish. Yerba mate, a green herb, is also known as Paraguay tea and, in the Guarani language, as *cao*. A favorite beverage, the dried leaves are infused, sweetened and sucked through a special tube that strains out the leaf particles. The plant grows abundantly and large quantities are exported to Argentina and Uruguay.

In the east there are large forested tracts where the trees, heavily festooned by tall creepers, grow to enormous heights. The *timbos*—beautiful timber trees—are a lovely sight in the spring when they are covered with purple blossoms.

Where the land rises out of the swamps in the Chaco, the valuable quebracho tree

## PARAGUAY

thrives. Its wood is extremely hard and it yields tannin, used to work leather. There are several varieties of quebracho: carob, whose seed is used in the making of flour and a fermented drink called *chicha*, and its wood for construction; urunday, whose wood is supposed to be harder than ebony; lapachos, which has yellow and red flowers; black laurel; and palo santo, used in cabinetwork.

The Paraguayan landscape charms the eyes. Unless it rains, the sky is a deep blue and the air very clear. In the forests, besides the great trees and shrubs, many of them covered with flowers in every possible hue, there are numerous birds. Parrots and parakeets are everywhere. Ibis wade in the streams. At twilight, vampire bats begin to glide through the foliage in search of prey. In the open country of the Chaco, rheas (relatives of the ostrich) roam.

Where there are few human beings, panthers such as the jaguar, and pumas and wildcats stalk. Savage as they are, they rarely attack man unless provoked. Ant-hunting bears (which have long snouts and special paws for catching ants), foxes, nutrias, wild pigs and tapirs are hunted for their furs in woods and swampy areas.

Reptiles are abundant. The yacare (*Alligator sclerops*) lies hidden in lakes and streams, and there are lizards, igua-

nas and chameleons. Paraguay has some particularly venomous snakes: the vivora de la cruz, the rattlesnake and the coral snake. Beware, too, of the fierce boa constrictor and the mboy-yagua, which is a water serpent. Sometimes as much as forty-five feet long, it is capable of overturning a canoe.

### *Flying and Crawling Insects*

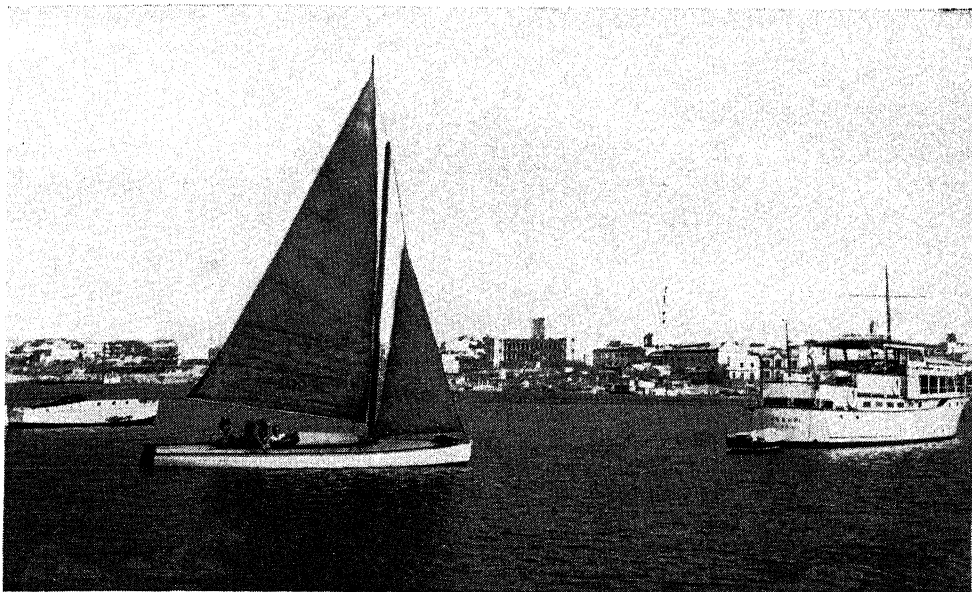
The country has its share of frogs and spiders and any number of insects: crickets, beetles, cockroaches. There are lovely butterflies, useful bees, and fireflies glow in the dusk. However, the swarms of locusts, mosquitoes and ticks are annoying and sometimes harmful. Common sights in flat country are the stumpy red mounds built by ants.

The history of Paraguay reflects somewhat the nature of the land. Here are groves of orange trees growing with little care, their fruit at hand for the mere plucking. Yet in the nearby brush, snakes lie in waiting, ready to inject their venom into unwary passers-by. Eastern Paraguay is rich, rolling grassland. West of the Paraguay River, one enters an inhospitable region of swamps and marshes. This is the same *Estero Bellaco* that took the Allies three years to cross in the War of the Triple Alliance (to which we shall return).

Alejo Garcia, a Spaniard, was the first European to reach the Paraguay River, in 1525. Two years later, Sebastian Gaboto (or Cabot) followed the course of the river to the mouth of a tributary, the Bermejo or Ipyta. Here, as he landed on the eastern shore, he was attacked by an Indian tribe called the Agaces. After losing many men, he was forced to leave, and soon returned to Spain.

In 1535, Pedro de Mendoza, the Adelantado (governor) of the Rio de la Plata area and founder of Buenos Aires, sent Juan de Ayolas to search for an overland route to Peru. Ayolas had orders to return within four months. He started up the Parana River with three boats and three hundred men and later turned into the Paraguay River. On August 15, 1536, the expedition reached Villeta,





PAN AMERICAN UNION

**SAILS UNFURLED** for a skim across the waters of Asuncion harbor. Both the capital and a port, Asuncion stands where the Paraguay and Pilcomayo rivers join in one broad stream.

where they were attacked by an army of Guaranis led by the chiefs Lambare and Mandua. Ayolas defeated the Indians and later made peace with them. Then he built a fort on the banks of the river. This was the origin of Asuncion, Paraguay's capital city. After resting a few months, Ayolas continued his journey to the port that he named De la Candelaria. He left Domingo Martinez de Irala there, and then proceeded to the foot of the Peruvian Andes. Shortly after starting on the return trip, he was slain by the Paraguas Indians.

Irala waited for Ayolas for six months before deciding to return to Asuncion. In the meanwhile Buenos Aires had been attacked by the Indians and Pedro de Mendoza had returned to Spain. The survivors of the assault on Buenos Aires made their way to Asuncion, and Irala became the head of the viceroyship (at that time a part of the viceroyalty of Peru).

On Holy Thursday in the year 1540 the Indians planned a conspiracy, whereby they would fall on the Spaniards during the procession scheduled for the afternoon. The daughter of one of the chiefs warned a Spanish captain, Juan de Salazar, of the plot. Irala was notified and

at once called the chiefs to confer with him, on the excuse that he had heard Asuncion was to be attacked from the south. However, once the chiefs were within the fort, he clapped them in prison. Later he ordered their execution. Their followers were unmolested.

Irala then divided up the land, set up villages and forts, named mayors and promoted marriages between the Spaniards and Indians.

At the same time, in Spain, Alvar Nuñez Cabeza de Vaca was appointed Adelantado with his seat in Asuncion. He landed on the coast of Brazil and made his way to Asuncion by land, a journey of extreme hardship. Most of the men with him lost their lives. This trip, however, was not without its rewards for he discovered the magnificent Iguassu Falls.

Cabeza de Vaca governed Paraguay brutally and made many other blunders. As a result, he was deposed in 1554 and replaced by Irala. Nevertheless, strife continued. There were many revolts by the Indians and Spaniards in turn, and a long succession of governors after Irala.

In 1591 Hernandarias (Hernando Arias de Saavedra) became governor.

## PARAGUAY

He was a Creole (a person of Spanish descent born in the colonies), the first to fill such a post. He had tact and was respected and loved. Yet in spite of this, he was unable to subdue certain tribes. In 1602, weary of the continual fighting, he sent missionaries to convert the hostile Indians. Thus it was that Fathers Simon Maceto and Jose Cataldini made their way into the Guayra region in 1609 to begin work that was to become famous.

The celebrated Jesuit missions in Paraguay started about nine years later. They were, however, based on the accomplishments of some earlier missionaries. At the cost of extreme hardship and some-

times of their lives, these men had been successful in winning the confidence and respect of many Indians. One result was that the Jesuit missions became oases of peace in the midst of disorder and bloody struggles.

They were organized into planned villages called *reducciones* (reductions). Each *reduccion* had a big central square. On one side was built the church and an adjoining graveyard, the school and the house for the oldest father, who was the highest authority in the mission. Other buildings belonging to the community, such as workshops for different crafts and warehouses, were erected around the open



THREE LIONS

**SURMOUNTED BY A CROSS**, the circular structure marks a family cemetery, in the country. The people often have private burial grounds right next to their dwellings, as here.

## PARAGUAY

space. Dwellings were built in blocks, which always had a covered veranda on the street side. The foundations of the houses were of stone, the walls of bricks or plaster and the roofs of wood. In spite of time, poor construction materials and invading vegetation, remains of these buildings may still be seen. Even in their sad state, the size of the structures and the stone carvings—obviously the work of true artists—with which they are adorned are astonishing.

The *reducciones* grew rapidly because of the appealing way of life they introduced and the strong community spirit they fostered. As more Indians were at-

tracted, new *reducciones* were created.

Each man in a *reduccion* worked part of the time on the land belonging to the mission. He also cultivated a plot of his own unless he was assigned to labor in a workshop or on construction. Each woman was given a certain quantity of cotton per week which she was to spin and weave for the community. The rest of her time could be devoted to household chores as well as weaving for her own family. All boys and girls went to school and also did the more unpleasant tasks on the mission property. This was to teach them, from childhood, the value of work and of organization. What was produced



THREE LIONS

**A WELL-GROOMED HORSE**, coat gleaming, is the cowboy's pride. As they work together, on the rolling grasslands of Paraguay, a deep bond is created between master and animal.





THREE LIONS

**A LONG WALK HOME** at evening on the Chaco, the western part of Paraguay, much of which is still wild. Largely a lowland, with heavy rainfall, the Chaco has many lakes and swamps.



IIAA

**THRESHING BY HAND.** The lower ends of the long curved sticks are wound with rawhide strips. As this gives the sticks more flaying surface, each whack beats out more grain.



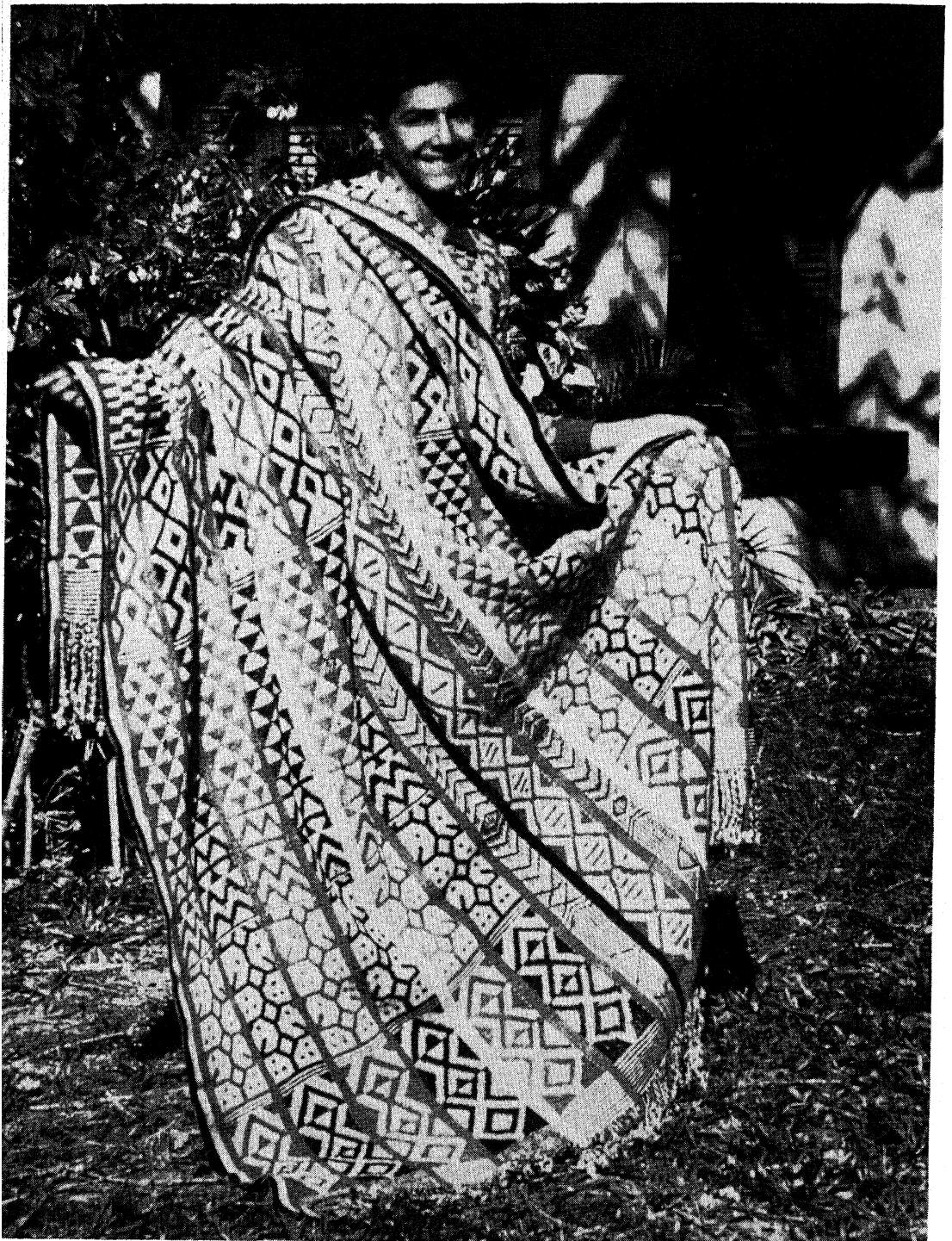
PAN AMERICAN UNION

**POWERFUL TEAMS OF OXEN** are used to haul logs from lumber camps to railways. Paraguayan forests have a wealth of fine timber trees, some of them with extremely hard wood.



EWING GALLOWAY

**MARKET PLACE IN ASUNCION** where most of the capital's citizens buy their food. One bare-foot young woman (center) casually balances a large basket of vegetables on her head.



PARAGUAYAN - EMBASSY

A PARAGUAYAN BOY displays a hand-woven Indian blanket, with fringed ends. The design is quite complicated and in vivid colors. Such weaving as this is the work of experts.

## PARAGUAY

for the community was to support the clergy, the sick, the old and the school. Staple foods and other provisions were stored together for the use of all.

Unhappily, the prosperity and the example set by the *reducciones* led to trouble. They were sacked and sometimes even burned to the ground by lawless bands, the Mamelucos, recruited from among outcast Spaniards, Portuguese and half-breeds. Their forays were made from the region of San Pablo, Brazil. By their attacks on the missions, the Mamelucos kept themselves supplied with provisions. They also captured Indians to sell as slaves. It was only after a number of these raids had occurred that the *reducciones* decided to arm for defense.

Trouble also came from another quarter. The *encomenderos*—people who had Indians in their service and were exploiting them—opposed the free and humane treatment of the natives in the *reducciones*. It was the intrigues of the *encomenderos* and the official pressure they brought to bear that were responsible in large part for the expulsion of the Jesuits from the missions in Paraguay.

In 1706 Carlos Morphi, an Irishman, was made governor. He it was who carried out the order to expel the Jesuits although he did it unwillingly and tried to help the fathers where possible. Thereafter the missions fell into neglect and the Indians returned to their old ways.

Toward the beginning of the nineteenth century the idea of independence from Spain was reaching a climax in South America. Paraguay broke away with the help of Gaspar Rodriguez de Francia. By 1814 Francia was in firm control and remained dictator of Paraguay until his death in 1840. Francia shut off the country from all outside contact. He even refused to negotiate with Simon Bolivar, the great South American liberator. Francia went so far as to declare marriages invalid if they took place without his consent.

After the country had a brief interval of freedom, Francia was succeeded by Carlos Antonio Lopez. Named president, Lopez was another dictator. He kept the country in the same backward state. Only the

army was strengthened. Because of his almost total lack of skill in either politics or diplomacy, Paraguay was drawn into serious disputes with Argentina and Brazil. When he died in 1862 his son Francisco Solano Lopez became dictator. Lopez II governed—or, rather, misgoverned—the country until 1870.

A strong feeling of nationalism had emerged during the time of Francia. This feeling now flamed up as did a frenzied military spirit. Encouraged by the organization and strength of his army, Lopez II became a tyrant, heedless of any consideration but his own selfish aims. He provoked the War of the Triple Alliance (1865–70). In this conflict, Paraguay was ranged against the combined forces of Argentina, Brazil and Uruguay. Few wars have been so violent, and the Paraguayan soldiers showed fanatic courage. Though incredibly outnumbered and with scarcely any arms, they inflicted a number of defeats on the Allied armies. There could have been no other outcome, however, but final victory for the Allies. Lopez fled and was killed on the way.

### *War's Tragic Aftermath*

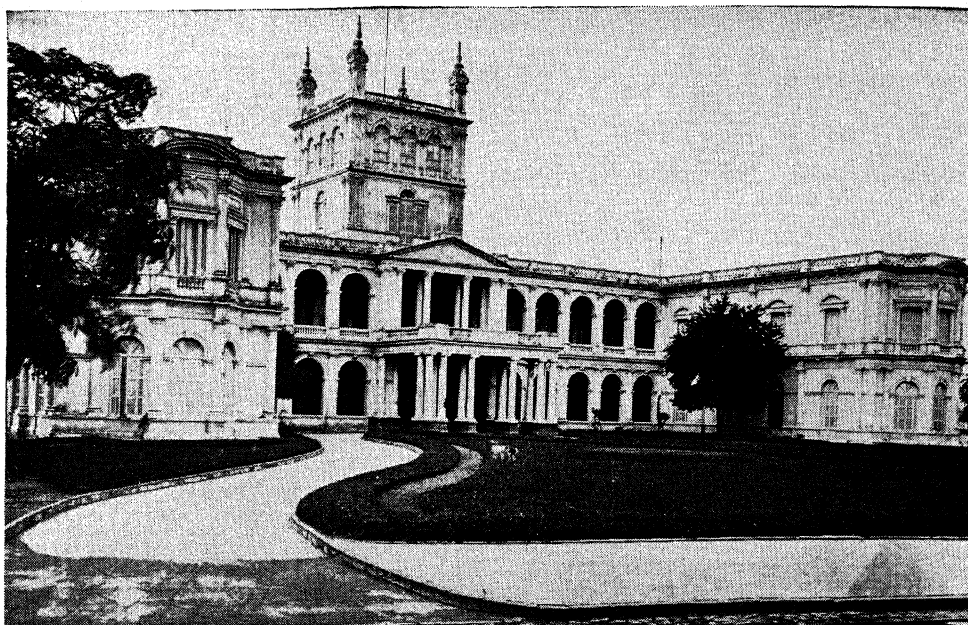
Paraguay was left prostrate. Of 1,337,000 inhabitants only 221,079 survived, and these were mostly old people, women and children. Agriculture, industry and commerce had to begin again as if they had never existed at all.

Though the country managed to stay independent, it was still torn by internal struggles. Attempts to organize a democratic government met with little success. Even into the 1900's, anarchy, dictatorship and the lack of political stability and liberty have held back cultural and economic progress.

Yet in spite of these circumstances, various groups of immigrants have made their way to Paraguay and have established successful and progressive settlements. Notable among them are the Mennonites, who came to the Chaco from Canada and elsewhere in the 1920's.

Guarani Indians make up about 65 per cent of the population of Paraguay. How long they have lived in this area no one





EWING GALLOWAY

**THE STATELY PRESIDENTIAL PALACE** is one of Asuncion's most handsome buildings. The city is laid out on a checkerboard plan and still has a somewhat Spanish colonial air.

knows. The rest of the population consists of about 30 per cent mestizos (half white and half Indian) and 5 per cent white (mostly Spanish).

When Europeans first reached present-day Paraguay, the Guaranis were a farming people, living in palisaded wooden houses. Today they have almost completely absorbed their colonizers. Though the official language of Paraguay is Spanish, Guaraní—a musical and well-constructed language—is the common tongue. Comparatively few of the people can read or write.

Asuncion, the capital, is the only really important city. It stands where the Pilcomayo and Paraguay rivers join, a location that is near the Argentine border. Laid out in a rectangular pattern in colonial days, Asuncion still has the charming air of an old Spanish town. Among its handsome buildings are the National Palace and a Renaissance cathedral. There are also museums, libraries and schools, a university, a theater and hospitals. Double rows of orange trees flank the main streets.

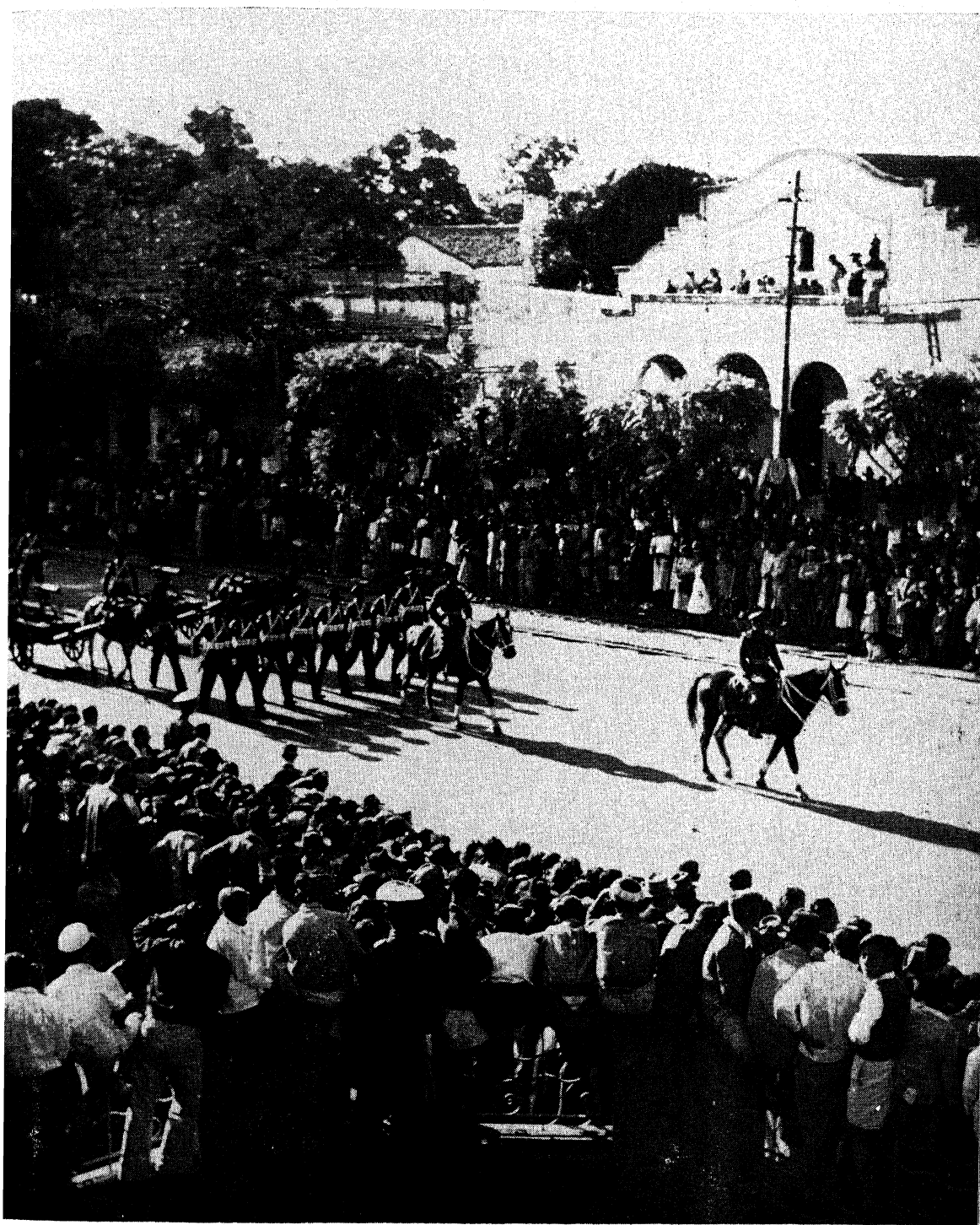
The city of Encarnacion, on the Parana River, is an outlet for timber and yerba

mate. The country's largest textile industry is centered in Pilar, on the Paraguay. Coronel Oviedo, Concepcion and Villarrica also are important mostly as commercial centers.

Poor transportation facilities hamper the economic development of Paraguay. The eight hundred miles of railway tracks that cross the territory and the few good highways are insufficient to meet needs. The Paraguay River (which in Guaraní means "crowned with palm trees") is the chief waterway. As it flows into the Parana River, it is the easiest and cheapest route to Buenos Aires. The Jejui River, a branch of the Paraguay, is navigable for a considerable distance, and there are other navigable streams that converge in the Paraguay Basin. So if canals were constructed an excellent network of water routes could be provided.

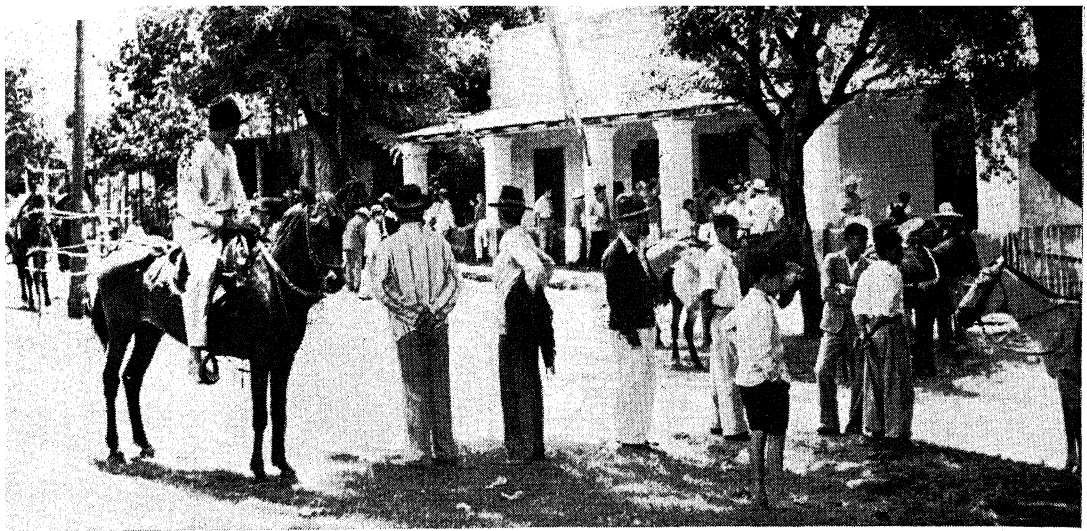
In 1546 the Spanish conquerors introduced one bull and seven cows into Paraguay and in 1550 Captain Nuflo de Chavez brought the first sheep. Today Paraguay has more head of cattle than it has human beings. Though the stock has improved slowly as better breeds have been imported, there are still more of the old-time





PAN AMERICAN UNION

**EVERYBODY LOVES A PARADE**, especially a military parade that includes prancing horses and precise marching. Here the Paraguayan Army puts on a dazzling show in Asuncion.



THREE LIONS

A PLEASANT BYWAY, shaded by trees, in the little town of San Bernardino. On the shore of a lake east of Asuncion, the town is Paraguay's chief pleasure and health resort.

creole bovines, which have long legs and very large horns. Meat packing is the country's chief industry and one of its greatest sources of income.

The quebracho trees are the basis of the lumbering industry. The extremely hard wood (*quebracho* means "break-ax") makes railroad ties, and there is a world-wide market for the tannin extracted from the bark. Though the trees are exten-

sively planted, they grow very slowly and the stands are becoming less numerous.

Nature has endowed Paraguay plentifully. Its resources could give the people a much higher standard of living than they now have. First, however, sound organization and a greater measure of freedom for the average Paraguayan are needed.

BY ROBERTO MUJICA-LAINEZ

## PARAGUAY: FACTS AND FIGURES

### THE COUNTRY

Bounded on the north by Bolivia and Brazil, on the east by Brazil and Argentina, on the south by Argentina, on the west by Argentina and Bolivia. Area, about 157,040 sq. mi., including the Chaco territory (about 95,337 sq. mi.) awarded to Paraguay in 1938; population, which consists mostly of Indians (the Guaranis), about 1,530,000.

### GOVERNMENT

Constitution adopted in 1940 vests executive power in a president. Has a one-chamber legislature; one delegate is elected for each 25,000 inhabitants. The government-appointed council of state corresponds roughly to the body North Americans know as a senate.

### RELIGION AND EDUCATION

Official state religion is Roman Catholicism but other denominations are tolerated. Though the constitution provides for free, compulsory elementary education, the illiteracy rate is high. Some areas have no schools at all. There are secondary and technical schools and a national university.

### COMMERCE AND INDUSTRIES

Economy is based mainly on agriculture and livestock, although only about 3% of the land is cultivated. Chief crops are maize (corn), manioc, cotton, sugar cane and peanuts. Minerals include an abundance of iron, manganese and copper, but they are little worked. Chief exports: cotton, quebracho extract, timber, hides, meats and yerba mate. Imports: mostly food, agricultural and other machinery, cotton textiles and vehicles. In 1943, a new unit of currency, the guarani, was created, then worth about 32 cents.

### COMMUNICATIONS

Has a national merchant marine. Highway mileage, 3,750; railroad mileage, about 800; there are bus lines in the more populous areas. 5 airlines (domestic and foreign) serve the country. Telecommunication is government-controlled.

### CHIEF TOWNS, WITH POPULATIONS

Asuncion (capital), 205,600; Encarnacion, 40,900; Coronel Oviedo, 34,400; Concepcion, 32,600; Villarrica, 28,000.

# URUGUAY

## *The Purple Land*

In the spring the rolling grassland of Uruguay is starred with wild flowers, most of the tiny blossoms a deep purple tint, and sometimes veiled in purplish mists. At such times the country is truly the romantic Purple Land. When white men first came, Spaniards and Portuguese, they called it the Banda Oriental del Uruguay—the East Bank of the Rio Uruguay. The official name of the modern nation is Republica Oriental del Uruguay, and citizens refer to themselves as Orientales. "Uruguay" is an Indian word. As applied to the waterway it may mean either the "river of birds" or the "river of snails."

THE smallest nation in South America, Uruguay lies on the Atlantic coast between two of the world's largest countries, Brazil and Argentina. The highlands on the north are a continuation of the Brazilian plateau, while the southern plains are an extension of the Argentine pampas. Northern Uruguayans are quite similar to the Brazilians of the mountainous state of Mato Grosso. Southern Uruguayans, especially those who live in the capital, Montevideo, differ hardly at all from Argentinians in personal characteristics. Even their speech is identical. In pronouncing the Spanish *ll* and *y*, they give these sounds the same change in tone as the *porteños* (the citizens of Buenos Aires); their expressions are typical of the whole Rio de la Plata area.

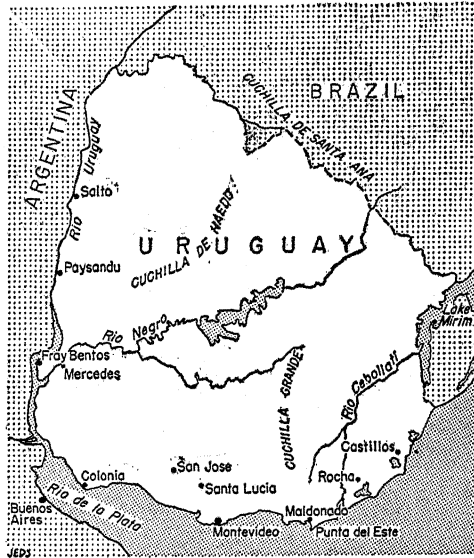
Although the Rio de la Plata was explored early in the sixteenth century, little attempt was made to settle the northern shores for many years thereafter. The land was a disappointment to the Spaniards, for there they found no wealth in gold or silver as they had elsewhere in South America. Yet in the rivalry between Spain and Portugal for territory, the Banda Oriental was a bone of contention. Thus Colonia was founded, in 1680, by the Portuguese to compete with the Spaniards directly across the Plata in Buenos Aires. The Portuguese also planned a settlement on the site of Montevideo, but before they could carry out this idea the Spaniards drove them out. So it was that Montevideo was founded as a Spanish colony, in 1726.

In 1776 the Banda Oriental became part of the Spanish Viceroyalty of the Rio de la Plata. When the revolution broke out against Spain in 1810, the area of the viceregal domain was about 2,300,000 square miles: that is, about one third of the whole of the South American continent. After the wars for independence, four nations—Argentina, Bolivia, Paraguay and Uruguay—eventually were carved out of the vast territory. Argentina got the lion's share, about half the old viceroyalty.

The creator of Uruguay was Jose Gervasio Artigas (1764–1850). When the revolt against Spain began in Buenos Aires, on May 25, 1810, Artigas was the leader of the Banda Oriental. He fought in alliance with Argentina, where victory was won at Tucuman two years later. In 1816 a congress of patriots met in Tucuman to decide the future of the former viceroyalty. Artigas sent delegates from Uruguay with instructions to vote for the establishment of a federal union of self-governing states, similar to the organization of the United States of America. This idea differed so much from the one cherished by the leaders of the congress that they refused to seat the delegates from the Banda Oriental. Thus Uruguay was lost to Argentina and its struggle for complete independence began.

At almost the same moment that the congress decided to abandon Artigas and Uruguay to their fate, the Banda Oriental was invaded by the Portuguese. By 1820 they had conquered the area, and it was formally annexed to Brazil in 1824.

## URUGUAY



After his defeat by the Portuguese, Artigas crossed the Rio Uruguay into the Argentine province of Entre Rios, where he had once led a civil war against Buenos Aires. But there again he was defeated, this time by the *caudillo* (political leader), who refused to accept Artigas' authority. Artigas was now forced to take refuge in Paraguay.

During these confused years, his strong championship of democracy impressed the United States Government. He was invited to spend his exile in the United States and was offered a life salary as a general. Such a distinction had been offered before only to Lafayette. Artigas, however, declined the honor and spent the rest of his life in Paraguay, where he died.

In 1825 a group of patriots, called the Thirty-three Immortals, declared the independence of Uruguay. With the help of Argentina, Uruguay defeated Brazil on sea and land. The decisive Battle of Ituzaingo came in 1827. By a treaty signed the following year, Brazil and Argentina recognized Uruguay as a separate, free and independent state.

Unhappily, this did not end Uruguay's troubles. For the rest of the nineteenth century, Uruguay was one of the most turbulent states in the Western Hemisphere. At various times France, Great

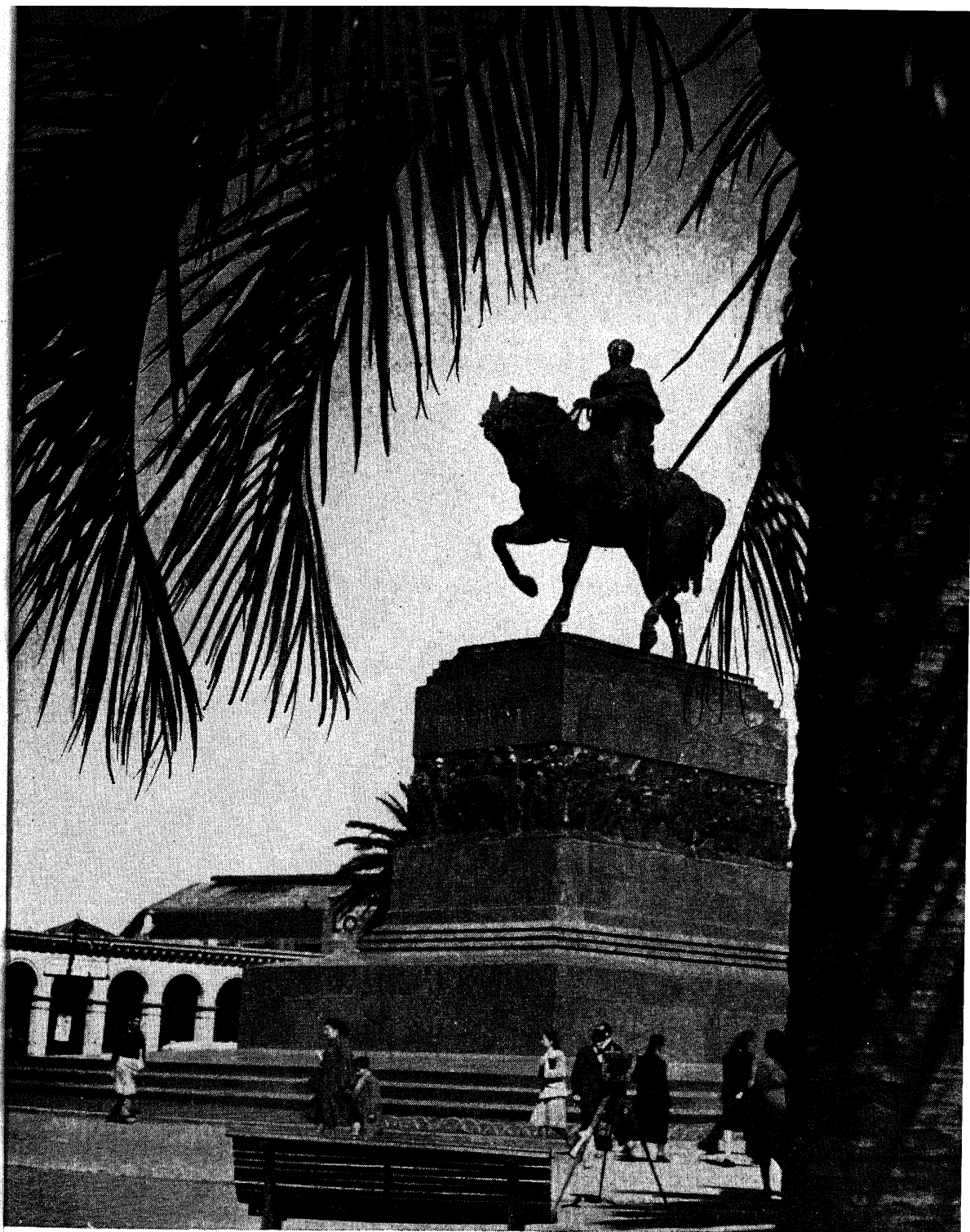
Britain and Brazil were drawn into conflict with Uruguay. There were endless civil wars between the leading political parties: Blancos (Conservatives) and Colorados (Liberals). With the dawn of the twentieth century, however, Uruguay produced another great man—Jose Batlle y Ordoñez (1856–1929). He was head of the Colorados and established lasting order. As president twice, and between times in an unofficial capacity, he dominated Uruguay from 1903 until his death. There has been no revolution in Uruguay since 1904, a record for Latin America.

### *Batlle's Aims for His Country*

Batlle came from an old Uruguayan family and was the son of a former president. Much of his youth was spent in Europe, studying, observing and drinking in new ideas about government. When he was thirty years old, he established the Montevideo daily *El Dia*. His editorials in the paper kept his ideas constantly before the public. His aim might be described as a paternalistic state. In this scheme of things, everybody would be employed in his productive years and thereafter be supported by the state. Ideally, Batlle wanted so to develop Uruguay that class distinctions and poverty would be wiped out. Some of the reforms that he introduced were extremely advanced for the Latin America of his day. They included compulsory free suffrage, with votes for women. Early in his career he put through the "law of the chair" by which employers must provide seats for their women workers. Batlle was also one of the founders of Pan-Americanism (co-operation among the American republics) and was a profound admirer of the United States.

Today Uruguay is one of the strongest and most stable democracies in the world. A large part of the credit for this achievement is due Batlle.

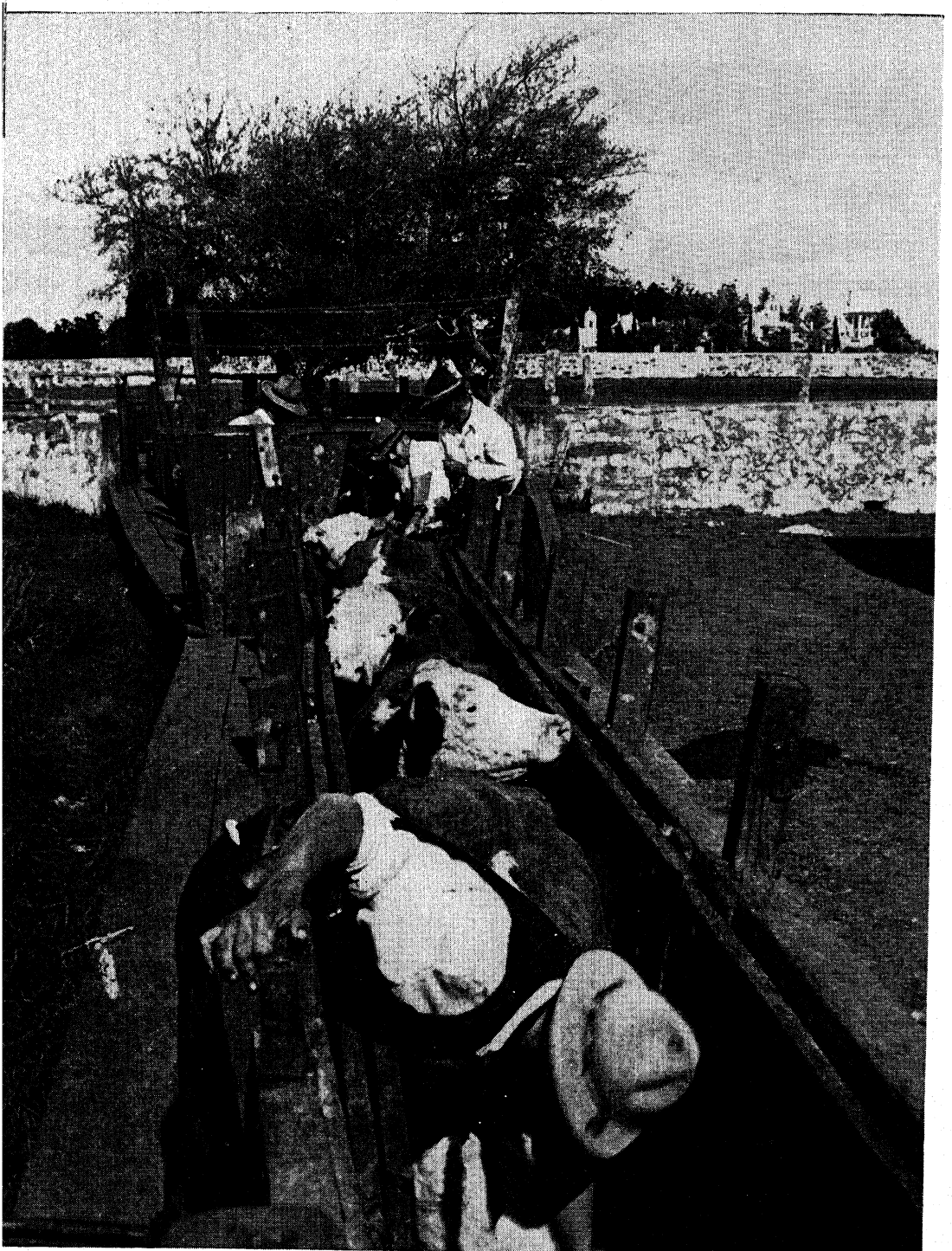
Uruguay is a small wedge-shaped land, with the point toward the northwest. The greatest distance from east to west is 320 miles; and from north to south, 350 miles. The sides of the irregular wedge are mostly water boundaries. The Atlan-



OFFICE OF INTER-AMERICAN AFFAIRS

**ARTIGAS ON HORSEBACK**—the noble statue of the great Uruguayan patriot is, fittingly, in the center of the Plaza Independencia, one of Montevideo's most attractive squares.





SCREEN TRAVELER, FROM GENDREAU

**BRANDING PEN.** The cattle are driven into a narrow runway that holds them in position for the painful but necessary ordeal of branding. At the same time their horns are cut.

## URUGUAY

tic Ocean washes 120 miles of coast, the shore line of the Rio de la Plata, on the south, is 235 miles long, and the Rio Uruguay flows along the 270 miles of the western border. Even the boundary with Brazil is partly stream and lake.

A chain of low mountains, the Cuchilla Grande, runs from Montevideo to the Brazilian border. This chain is Uruguay's watershed. On one side, short streams flow east to the Atlantic. On the other, longer rivers, such as the Rio Negro, flow west through narrow valleys to meet the Rio Uruguay. Along the divide a few summits, capped with blocks of granite, are more than 1,900 feet above sea level. Other hilly regions are the Cuchilla de Santa Ana, marking the frontier with Brazil, and the Cuchilla de Haedo, in the western part of the country.

### *Sand Dunes and Tidal Lakes*

The Atlantic coast is a lowland, with shifting sand dunes that may extend inland for five miles or more. In some places pine and eucalyptus trees have been planted both to hold the sand and as a source of wood. The splendid beaches of the coast are famous. Punta del Este, the best-known, in recent years has drawn many visitors; the film festivals held there have proved an attraction to tourists. Another feature of the coast is the number of tidal lakes (Laguna del Sauce, Jose Ignacio, Castillos, Negra and others) shut in by islands. The good harbors, however, are farther south, on the shore of the broad though shallow Rio de la Plata.

### *The Rio de la Plata*

The Rio de la Plata, formed by the union of the Parana and Uruguay rivers, is really a funnel-shaped estuary, or gulf, 170 miles long. At its head it is already 25 miles wide. At Montevideo it has broadened to 57 miles, and where it sweeps into the Atlantic it is 138 miles wide. Though the Plata carries a tremendous volume of water, it is comparatively shallow. Near the open sea, its greatest depth is only 65 feet. Moreover, the waterway is obstructed by sandbanks. To keep navigation channels open, con-

stant dredging is necessary.

The Rio Negro (Black River), a tributary of the Uruguay, crosses the country from northeast to southwest but it is navigable for only a short distance. It is of greater importance as a source of power. At about the middle of its course there is an enormous hydroelectric plant, which includes a vast reservoir.

### *Water for the Plains*

The chief rivers of the interior are the Santa Lucia and the Cebollati. With their small branches they keep the plains well supplied with water.

The largest lake of Uruguay, the Mirim, 108 miles long by up to 25 miles wide, is part of the boundary with Brazil. Only a marshy bar, 10 to 35 miles, separates the lake from the Atlantic.

Uruguay has a subtropical climate and, under the influence of steady winds from the Atlantic, temperatures are usually moderate at all seasons. It seldom gets cold enough for frost, though when winds blow from the heated northern interior during the summer, the thermometer may show a high of 100° F. Even then there are often refreshing cool breezes at midday. In Montevideo, the average winter temperature is 52° F., summer 73°.

### *Where Rainfall Is Dependable*

Uruguay receives about 38.5 inches of rain a year, rather evenly distributed through the seasons. Severe droughts are rare.

Lush grass, which may grow a yard high, covers much of the rolling land. The black soil is highly fertile, kept rich by the grasses because they return organic matter to it. In addition, the soil has a chance to retain moisture as the rainfall is so well distributed. Much more menacing than any hazard of weather are the swarms of locusts that suddenly appear some years. Descending on the land in great clouds, they strip trees, gardens and orchards of leaves and may eat even the grass and weeds.

Uruguay has a smaller area of forest, less than 2.5 per cent, than any other South American country. The trees

## URUGUAY

grow in the higher northwestern section and in narrow strips along western river valleys, particularly the Rio Negro. In the northern forests, eucalyptus, poplar, willow and paradise trees thrive. Among the hardwoods are ñandubay—which has a tendency to become extremely hard—espinello, coronilla and lapacho.

Wild animals have largely disappeared from Uruguay, though pumas and jaguars still roam wooded river banks. Tapirs, deer, foxes and wildcats are found in remote forests in the northern mountains. There are birds in considerable variety: wild ducks and turkeys, parakeets, partridges, hummingbirds, storks, cranes, cardinals, lapwings.

Uruguay is the most densely populated South American country, with thirty inhabitants per square mile, and its population is increasing by about 25,000 a year. Though there are few uninhabited areas, the greatest concentration of people is in the south and southwest. About a third of all Uruguayans live in Montevideo.

Ninety per cent of the people are of European descent, mostly Spanish and Italian. This is partly the result of the large

waves of immigration that began after 1828, when newcomers flowed in from Spain and Italy. Hardly any Indians are left and there are few mestizos or Negroes.

The standard of living in Uruguay is among the highest in all the American republics. The constitution guarantees the people "the enjoyment of life, honor, liberty, security, work, and property."

The country has an excellent system of free schools from elementary through university level, and at least 80 per cent of the people can read and write. The University of the Republic, founded in 1849, in Montevideo, has faculties of medicine, social science, dentistry, pharmacy, chemistry, engineering, architecture, economics and agriculture, with fine teachers.

### "I Have Seen a Mountain"

Chief of Uruguay's cities is the capital, Montevideo. Its name comes from *Monte vide eu* (I have seen a mountain), an exclamation one of Magellan's pilots is supposed to have made when his ships entered the Rio de la Plata in search of the strait.

Originally the city was built on the low rocky headland, shaped like a whale's back, that juts out between the river and well-protected Horseshoe Bay. In this section one may still see a few old houses in the style of Seville, Spain, with grilled windows, red-tiled roofs and patios. The area has become mostly a business center, however, with banks and the offices of shipping and trading companies. The harbor has dredged channels, outer and inner breakwaters and up-to-date piers and loading machinery.

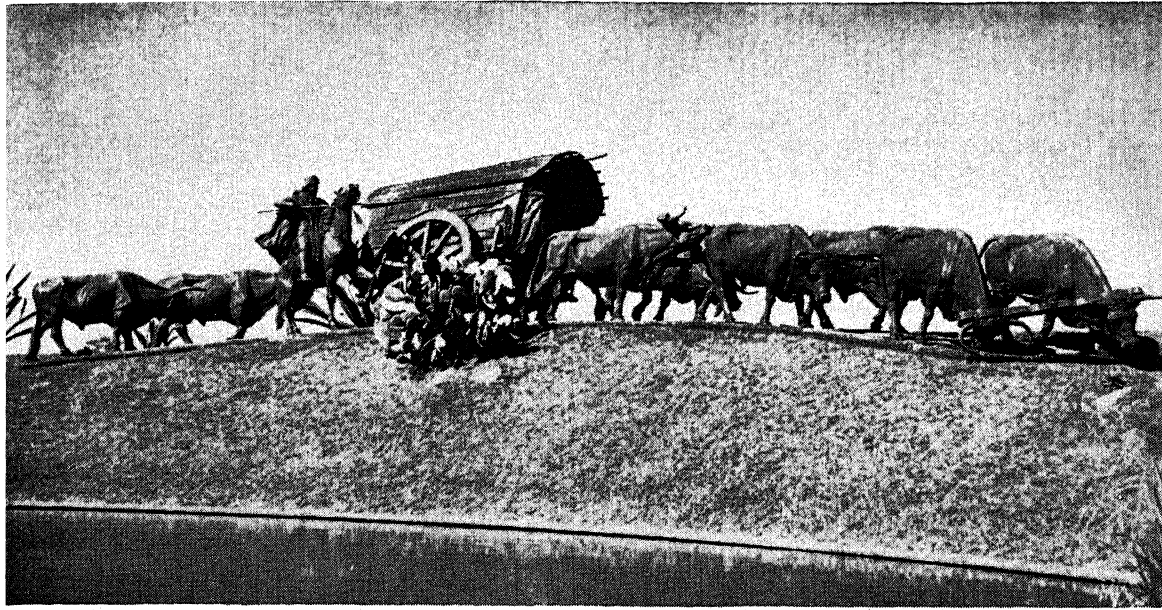
The modern city spreads out into the flat country to the north, and west around the Cerro. This is a lofty, isolated cone, the "mountain" that Magellan's pilot saw. One of the most beautiful capitals in Latin America, Montevideo has tree-lined avenues, parks, gardens and palm-shaded plazas.

Plaza Independencia stands where the old and new sections meet and is the political and social heart of the city. A great square, it has two acres of shrub-



OFFICE OF INTER-AMERICAN AFFAIRS

**GOOD NEIGHBOR**—a monument in memory of a Brazilian, Viscount of Maua, in Montevideo.



PAN AMERICAN WORLD AIRWAYS SYSTEM

**LA CARRETA (THE CART)** is a life-size bronze group, in Montevideo, commemorating the Uruguayan pioneers. The sculpture is made very real by following the slope of the ground.

bery and flower gardens and a fountain in each of the four corners. In the center is a statue of Artigas on horseback. Handsome buildings surround the plaza. Most of them have pillared fronts so that there is an almost continuous line of colonnades. On one side is the Legislative Palace, built of the fine marble found in Uruguay. It is often called the Marble Palace. From the top of a skyscraper hotel on the plaza, there is a magnificent view of the harbor and the whole city. Not far away the domed cathedral looms above the flat-roofed houses.

Opening east out of the Plaza Independencia is Avenida 18 de Julio, the city's main thoroughfare, lined with department stores, shops and theaters.

The oldest park in Montevideo is the Prado. It was once an estate whose wealthy owner spent a fortune on it. This included an extraordinary rose garden. There are more than eight hundred varieties of roses, a dazzling sight in November when the blooms are at their height. Montevideo has the sobriquet City of Roses.

The most popular park of all is the Rodo. It is especially gay in summer

when the open-air theater and the amusement area are in full swing. On a large artificial lake one may glide around in small boats, canoes or gondolas past elaborate gardens, with more roses, set against a lush background of eucalyptus, palm, paradise and ombu trees.

Along the shore near Montevideo are fine beaches. During the warm months they become an international playground. In the restaurants one may sample a Uruguayan specialty, *parrilladas criollas* (grilled fish—but with a difference!).

About sixty-five miles east of Montevideo is the city of Maldonado. From there one can take a boat out to Lobos Island, which has the most powerful lighthouse along the entire coast of South America.

In the other direction from the capital, up the Plata, is Colonia. This city is built on a small hill around a picturesque square. The charming old quarter has a Franciscan monastery, a lighthouse and the remains of a colonial fort.

Three of the most important cities are on the Rio Uruguay: Fray Bentos, a port and meat-packing center, which frequently has the rather pleasant odor of

## URUGUAY

rich beef soup; Paysandu, nicknamed Queen of the North because of its lively trade; and Salto, a livestock and agricultural center, which has a yearly cattle exposition. Mercedes, on the Rio Negro, above its junction with the Uruguay, is another farm and livestock center.

As in most other Latin American countries, the Sunday to Tuesday before Lent is carnival time. Then the houses are decorated and mummers parade the streets. In each district, open-air stages are set up on which variety shows or serious plays are given. Hotels, clubs and casinos in the cities are thronged with masked dancers, moving in the rhythm of a tango or a samba. At Pocitos, on the coast, there are flower battles. Another festive occasion is La Semana Criolla (Creole Week), something like a rodeo, with horse breaking and stunt riding. Women rival men in skill.

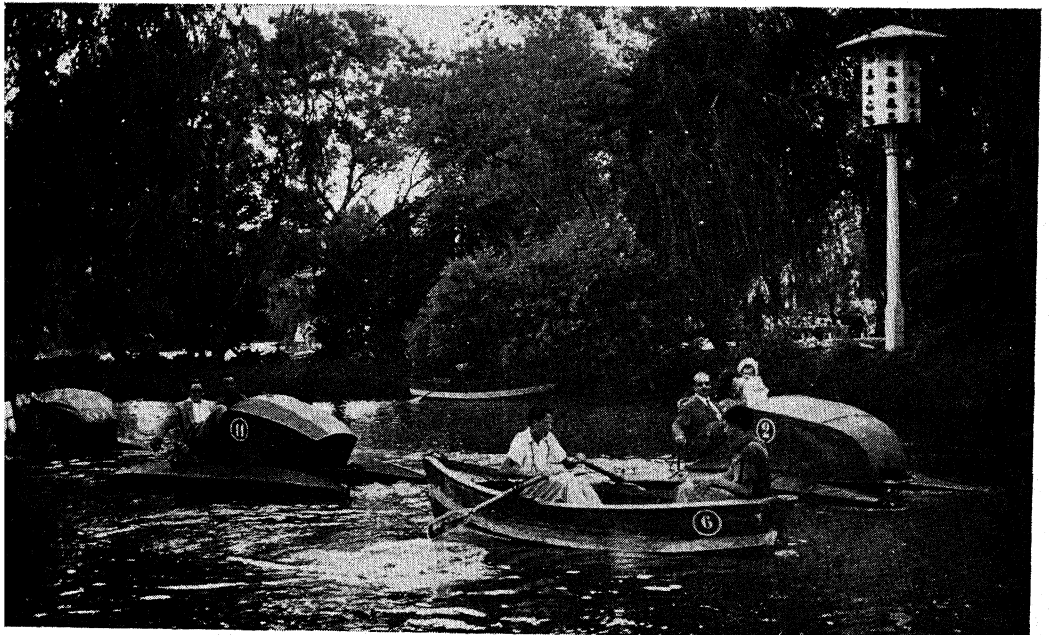
Considering the great expanse of rich grassland, it is hardly surprising that about 60 per cent of the land is used for grazing and that stock raising is the chief

agricultural activity. Only about 7 per cent of the land is cultivated. Wheat is the chief crop.

Cattle were first introduced into Uruguay perhaps as early as 1580 and, once there, multiplied at a rapid rate. At first the Gauchos simply trailed after the herds, wandering at will, killing the animals for food and selling only the hides. But when Argentine cattle buyers began to arrive, they hired herdsmen to tend the animals in set-off areas around their headquarters. Eventually the land came to be parceled out into *estancias* (ranches) with boundaries. In time, also, the quality of the herds was improved by importing breeding stock from Argentina and England.

Today the *estancias*, which may raise cattle or sheep or both, are fenced. In fact, on the best-managed ones the land is divided into rather small enclosures: 200 to 500 acres for the main pastures and 40 to 100 acres for smaller paddocks near headquarters.

The ranch buildings, plastered white,



THREE LIONS

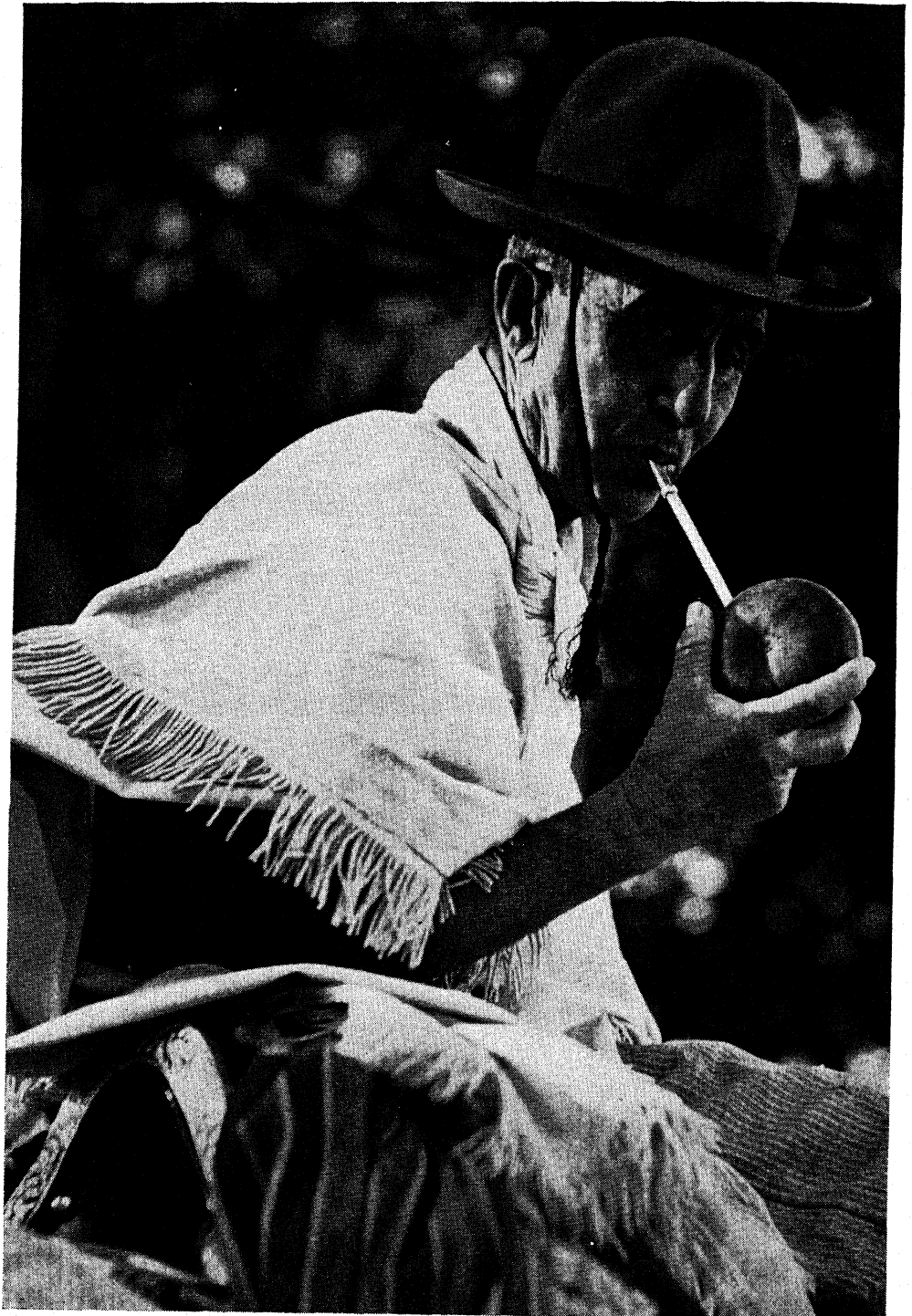
**"GONDOLA" OR ROWBOAT** for your pleasure in the Rodo, the most popular of the capital city's many parks. Gliding on the lake, one passes elaborate gardens, noted for roses.





SCREEN TRAVELER, FROM GENDREAU

**WIDE THOROUGHFARES**, lined with trees, help to make Montevideo one of the world's most delightful capitals. There is amazing variety in the styles of the buildings.



PAN AMERICAN UNION

**SIPPING MATE**, a cowboy takes his ease. Mate is a kind of tea brewed from the leaves of a holly plant. The tea is drawn from a gourd through a silver tube called a *bombilla*.

## URUGUAY

gleam through groves of trees. There are *galpones*, or barns, for shearing sheep or storing wool, stables for horses and sheds for cattle. In the mild climate, winter shelters are not needed; the animals can be kept outdoors all year long, well-fed and well-watered.

Clustered together are small houses, of brick or adobe and often thatched, for the workmen and their families. It is customary to furnish them with food, chiefly mutton. The home of the *estanciero*, owner or manager, is generally a rambling, roomy, one-story structure, made of brick, plastered, and roofed with tiles. Usually there are gardens and orchards nearby, yielding oranges, peaches, apricots, figs, plums, roses and other flowers, and vegetables.

Fishing has been little developed in Uruguay. During the winter, however, Montevideo serves as an anchorage for the various whaling fleets (British and

Scandinavian) operating in the South Atlantic.

There is not much mining in Uruguay. Gold, copper, lead, manganese and talc resources have been worked to a small extent, but only the gold has commercial possibilities. The most important mineral resources are the excellent building stones—marble and granite—besides agate and onyx. Construction materials, such as quartz, refractory clay and talc, are exported to Argentina.

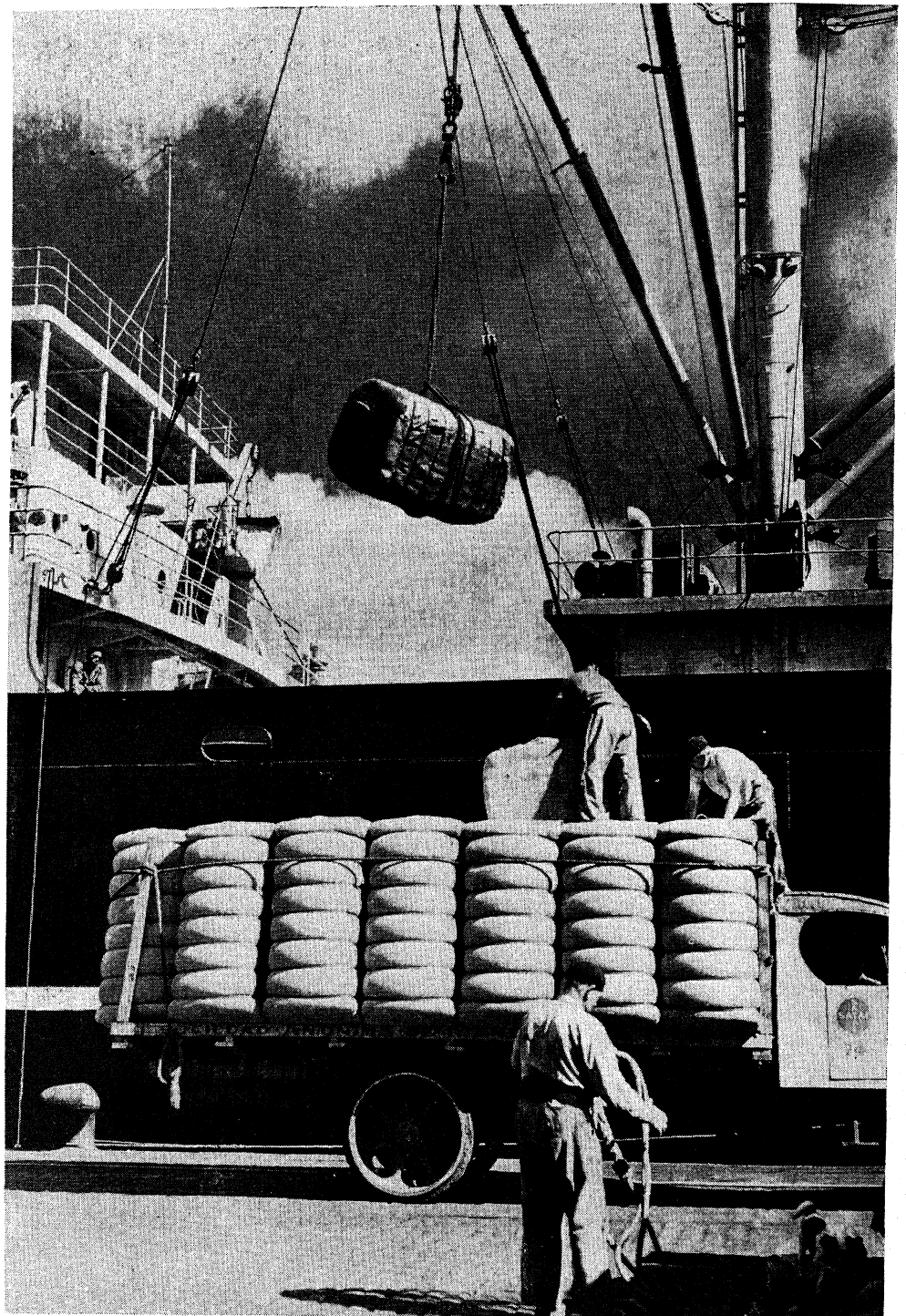
Handicapped by the lack of coal, iron and oil, Uruguayan industry, with the exception of meat packing, is on a very small scale. The first meat-extract plant was established in Fray Bentos in 1864, and the first freezing plant (*frigorifico*) was set up in 1905. Today the *frigorificos* in Montevideo, Paysandu, Fray Bentos and Salto supply 73 per cent of the country's needs for meat.

In the capital and other cities are tan-



SCREEN TRAVELER, FROM GENDREAU

**EWES AND THEIR LAMBS** browse placidly on a big *estancia*, or ranch. Uruguay's climate is so mild that even in winter the farm animals can be turned out to pasture.



PHILIP GENDREAU

**LOADING BALES OF WOOL** on a ship for delivery overseas. So tightly are the bales bound with metal strips that they look like stacks of plump tires for automobiles.





MOORE-MCCORMACK LINES

A PALATIAL HOTEL in Montevideo which dwarfs the palms in front. More or less in the Spanish colonial style, the building has an extraordinarily ornate and intricate façade.



## URUGUAY

neries for leather goods, including shoes; knitting and textile mills; paper mills; and factories that turn out matches, soap, candles, glass, furniture, rubber goods and cigarettes. Outside of meat processing, the chief food industries are flour mills, sugar refineries, breweries and candy factories. Building, highway and bridge construction are fairly important.

The foreign trade of Uruguay, which increases constantly, consists of 90 per cent animal products. The exports, 75 per cent of which are shipped out through Montevideo, are mainly wool, processed farm products, hides, raw farm products, and textiles. The United States is Uruguay's best customer, followed by Great Britain, Argentina, Brazil, Belgium, the Netherlands, Peru and Italy.

Montevideo is the country's transportation center. A network of railroads and fine highways radiates from the city. Uruguay has built two of the best-paved sections of the Pan American Highway: to the northeast, connecting with Rio de

Janeiro, and between Montevideo and Colonia. Together the Plata and the Uruguay provide more than five hundred miles of navigable inland waters.

As we have indicated, Uruguayans believe deeply in democratic principles. On December 16, 1951, they voted to amend the constitution, replacing the president with a nine-man council. This council, in turn, chooses nine ministers of departments. The organization resembles the Swiss form of government.

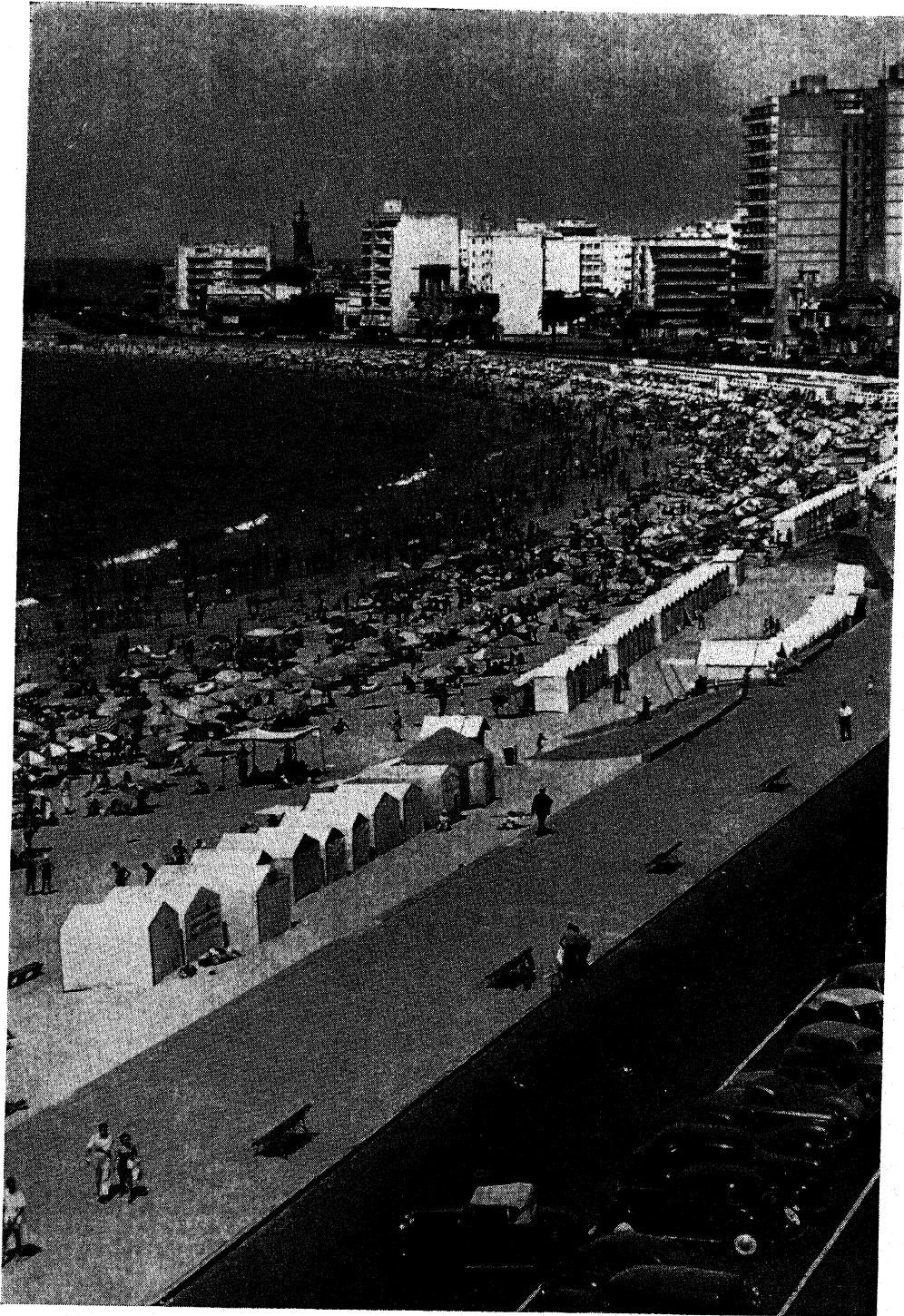
Foreigners in Uruguay may become naturalized without losing their former citizenship. In fact, the Uruguayan constitution makes naturalization practically automatic for responsible foreigners after from three to five years residence in the country. For those who have performed "notable services" or are of "outstanding merit," the period is less. Even those foreigners who have not been naturalized have the right to vote after fifteen years of residence.

BY ROBERTO MUJICA-LAINEZ



BLACK STAR

**THE CITY GOVERNMENT** of Montevideo is housed in an imposing classical structure. To reach the main entrance, one mounts a series of broad steps and passes between columns.



TRIANGLE

**BATHERS AND SUN WORSHIPERS** crowd Montevideo Beach at the height of the season, which is in March. The beach is not on the ocean but on the wide Rio de la Plata.



PAN AMERICAN WORLD AIRWAYS SYSTEM

**PLANES FROM ALL OVER THE WORLD** roar in to land at Carrasco Airport. Uruguay has an airline of its own—PLUNA—and is served by the lines of other countries.

### *URUGUAY: FACTS AND FIGURES*

#### *THE COUNTRY*

Bounded on the north and northeast by Brazil, on the east by the Atlantic Ocean, on the south by the Rio de la Plata estuary and on the west by Argentina. Area, 72,172 sq. mi.; population, about 2,540,000.

#### *GOVERNMENT*

Executive power of the Republic is vested in a 9-man National Council, the chairmanship of which rotates annually. General Assembly consists of a Senate of 31 members and a Chamber of Representatives with 99 members. They are elected by popular vote for 4-year terms.

#### *COMMERCE AND INDUSTRIES*

About 60% of the total area is devoted to stock raising and the rest to mixed farming and ranching, though only about 7% of the land is cultivated. Farm products include wheat, linseed, barley, oats, rice, sugar, wine and fruit. Mining is unimportant, though there are deposits of gold, silver, copper, lead, manganese. Industries include sugar and petroleum refining; meat packing; manufacture of textiles, tires and rubber goods, cement, electrical equipment; metallurgy; tanning; distilling. Chief exports: wool, meat, hides, linseed, wheat. Imports: raw materials; machinery and spare parts; fuels and

lubricants; foodstuffs. The monetary unit is the peso, worth about 30 cents.

#### *COMMUNICATIONS*

There are nearly 1,900 miles of national railways, 26,000 miles of highways (more than 4,000 paved) and 775 navigable river miles. A domestic airline (PLUNA) and Pan American Airways provide air transportation. Uruguay has nearly 102,000 telephone sets and 48 long-wave and 5 short-wave broadcasting stations.

#### *RELIGION AND EDUCATION*

All religions tolerated. Church and state are separate. Majority religion is Roman Catholicism, though there are a number of Protestant churches, schools, etc., in Montevideo. Literacy rate, about 80%. Education is free through university level; primary education is compulsory. Most of the 2,000 elementary schools are public; of the 92 secondary schools, 38 are private. There are rural, special and normal schools and a state university. The language is Spanish.

#### *CHIEF CITIES, WITH POPULATIONS*

Montevideo (capital and principal port), about 850,000; Paysandu, 65,000; Salto, 55,000. The latter two are Uruguay River ports.

# THE SILVER LAND

## *Life in Argentina, on Pampas and in Cities*

The blood of the Indian, the Spaniard and the Gaucho fed the endless pampas that later became known as Argentina. It was the Indian who cherished the land, the Spaniard who exploited it. But it was the Gaucho, product of both, who gave birth to the nation. In defense of what each considered its right, Spaniards and Indians fought each other bitterly, writing with their swords and arrows the first chapter of the history of the present country. After Argentina threw off the yoke of Spain, in the early 1800's, immigration was encouraged. As a result, the population today is largely of European descent.

UNLIKE the pioneers who landed on the shores of North America to settle down and start a new life in a new world, the Spaniards who went to the colonies of the Spanish Crown did so to get rich quickly and then return home with their new-found wealth.

Noblemen who were not included in the family heritage—according to Spanish law, title and all properties went to the eldest son—coveted gold. Unscrupulous adventurers and former convicts were just as eager for riches. In search of an El Dorado, which wasn't there, they looted and ravaged the young land that had received them with open arms. They killed the Indian, but the Indian killed back. So the first pages of Argentina's history are bloody, bitter and filled with injustices that inflicted wounds hard to forget.

The Puerto de Nuestra Señora de Santa Maria de los Buenos Aires, later shortened to Buenos Aires, the capital of Argentina, was the Cinderella of the Spanish conquest. Unlike her wealthy sisters—Mexico City and Lima—she had no silver or gold to offer the avid conquistadors, and so they despised her.

In search of the Alto Peru (what today is Bolivia) and its silver, and looking for a way to Lima and its gold, the conquistadors pushed forward, leaving behind the small settlement of Buenos Aires. They went north, across the jungle and the rivers.

The Indian did not always oppose them. Sometimes friendly or subdued tribes helped them in their enterprises. In the far-off plains and in the dense intermin-

gled growth of the jungle, the white Spaniard and the brown-skinned Indian did not always remain aloof. There was intermarriage. So when the conquistadors returned to Buenos Aires after their vain search, they left behind them a new kind of man, half Indian and half white, the Gaucho—Argentina's romantic cowboy.

The Gaucho was the most original of Argentine products. Always on his horse, he was like a centaur, the hooped half-human creature of Greek myth. Silent and suspicious, he nevertheless could show the hospitality of an Arab to a man who threw himself on his mercy. The sober Gaucho was addicted only to drinking mate, Paraguayan tea. His vision and hearing were highly developed. He expressed himself through his guitar; and his saddle was his home. He was the link between the Spanish conquistador and the conquered Indian. Through his veins might run the blood of Moorish forefathers, for the Moors had once conquered and lived in Spain. Like them he dreamed under the glittering stars. Though he was the typical product of the land of his birth, he despised the Indian and he hated the Spaniard. Above everything he loved freedom, and this to him meant open spaces, fresh air and clear sky. Hating confinement, he avoided the city as much as possible. When the surge for Argentine independence reached a climax, the Gaucho played a very important role in the struggle.

On the heels of the Spanish conquistador, small merchants and businessmen from Spain arrived in Buenos Aires.

## THE SILVER LAND

Some of them stayed there, but others went to the interior and settled in small towns that were to become important Argentine cities. Here their sons were born.

Those who were born in Buenos Aires called themselves *porteños* (people of the port); and those in the interior, *criollos* (creoles). So, born on Argentine soil, there were three types of natives as a result of the Spanish conquest: the *porteño* of Buenos Aires, the *criollo* of the interior, and the Gaucho, the man from the endless plains. These three came to have the same aim and ideal: independence from Spain.

Twice, in 1806 and 1807, strong English expeditions tried to seize Buenos Aires. (England was then at war with France and Spain.) But twice they were defeated by a makeshift army of *porteños*, *criollos*, Gauchos and Spaniards. On both occasions the Spanish Viceroy fled, leaving the city to the mercy of whichever side might win. Thus resentment was added to the fuels feeding the idea of independence from Spain.

To Argentina, the revolt of the English colonies in North America was the example, whereas the French Revolution was the inspiration. But it was only after defeating the English that the Argentinians realized their strength. Gauchos, *porteños* and *criollos* revolted on May 25, 1810, united at last, in a bloody struggle. It continued until July 9, 1816. On that day Argentina achieved independence from the mother country, Spain.

### *San Martin Crosses the Andes*

Freedom, however, was threatened from across the Andes. There Spain was still in control. So in 1817 an Argentine army, under the command of General Jose de San Martin, crossed the high Cordillera to liberate Chile and Peru. The campaign ended in 1822. That year the Liberator and Protector of Peru, as Peruvians call San Martin, gave the command of his army to the Venezuelan hero General Simon Bolivar, who was coming from the north with the same purpose. Spain was driven at last from the colonies on the Pacific.

With its independence now firmly established, Argentina opened its doors to world trade. At the same time there began a wave of immigration. Spaniards, Italians, Irish, Jews, Germans, French and others flocked to settle in Argentina, where the prize was now the rich soil. As a self-made country, the new republic offered an ideal opportunity for ambitious men, and many of these newcomers became self-made Argentinians.

### *The Shape of Argentina*

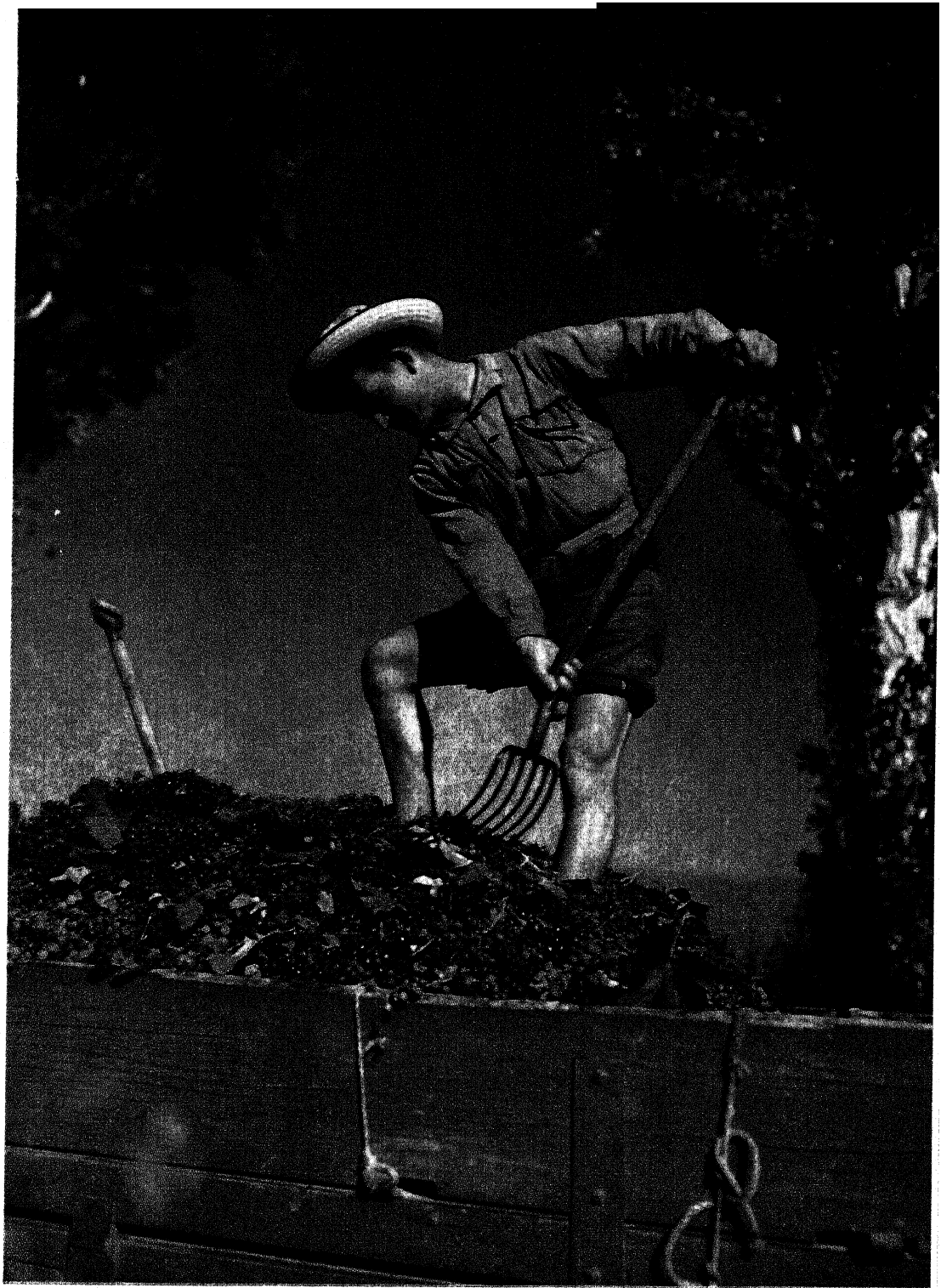
Argentina is shaped something like a triangle with its apex in the south. From the Bolivian border it extends for 2,300 miles to Cape Horn in the territory of Tierra del Fuego. Ushuahia, the territory's capital, is the southernmost city of organized government in the world. The Andes Cordillera hems Argentina in on one side; the South Atlantic borders it on the other. The widest part of the triangle is about 930 miles. The coastline on the east, about 1,600 miles long, has many natural harbors.

If, reversing the latitudes, Argentina were placed over the North American continent, it would extend from Tampico, in Mexico, up to Winnipeg, in Canada. This means that almost every kind of climate, from torrid to cold, can be found in Argentine territory. In the southern part the weather can be bitter, while the central portion is temperate and the northern section gradually merges into the subtropics. In Buenos Aires, the people celebrate Christmas (with "snowy" Christmas trees), supporting heat waves of 100°. In July their thermometer descends to 30°.

Argentina's great variation in climate is due not only to the fact that it stretches over thirty-three degrees of latitude. Heights of land—mountains, plateaus—and nearness to large bodies of water also exert considerable influence. The higher one goes, the colder. Near the ocean, severe extremes of heat or cold are unlikely.

Climate and the lay of the land divide Argentina into four main regions: the pampas, the semitropical northern plain, the Andean region and Patagonia.

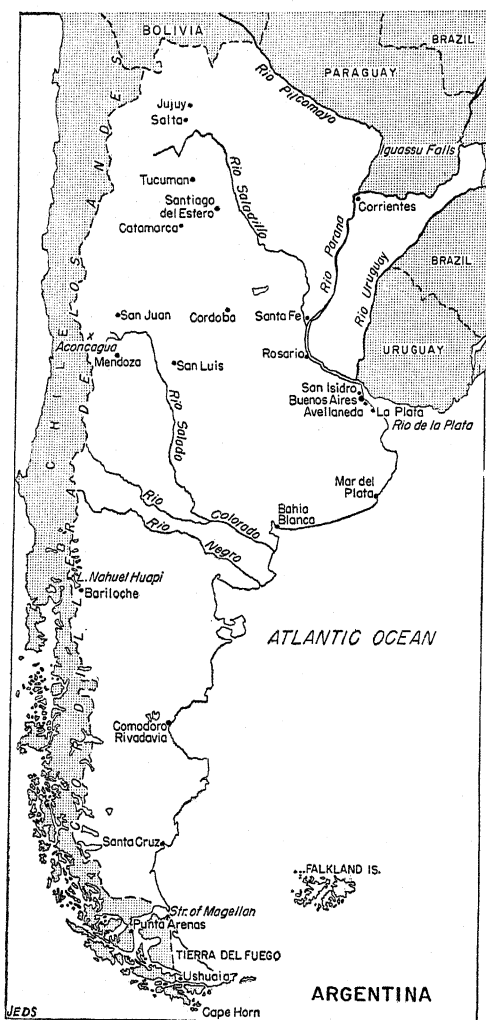




SCOTT D'ARAZIEN

**LUSCIOUS GRAPES** are heaped high at harvest time in Mendoza Province, at the foot of the Andes. Once a desert area, the irrigated land now has thriving orchards and vineyards.

## THE SILVER LAND



The treeless plains called the pampas form a semicircle, which fans out into the interior from the city of Buenos Aires, and embrace the provinces of Buenos Aires, Santa Fe, part of Cordoba, San Luis and La Pampa. These plains, which sometimes have been compared to the Russian steppes, cover about one-fifth of the country's area. They extend from the Rio Colorado, in Patagonia, north to the Rio Saladillo. The soil is fine, porous, deep and very fertile. Although the pampas also resemble the prairie lands of North America, they have the advantage of being closer to the seaboard.

In spite of the efforts being made to

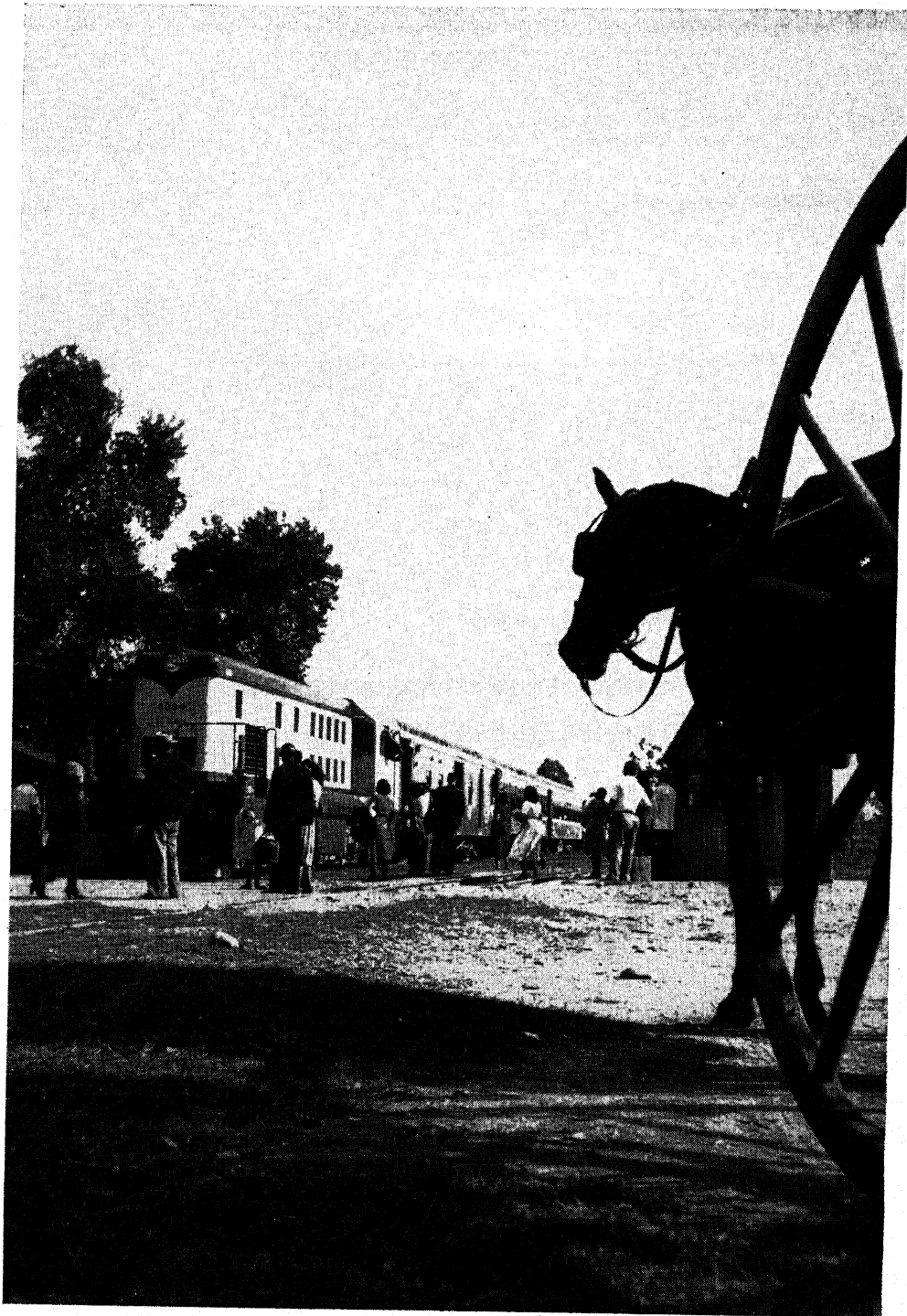
industrialize Argentina, it remains an essentially agricultural country. As such, for many years, it was considered one of the wealthiest in the world. It was and is a wealth that has its sources in the cultivated fields and grazing lands of the pampas. So much grain is produced in the region that it has been called the "world's barn."

Stretching in an unbroken level in every direction, the grass ruffled by the wind, the pampas look like an enormous emerald sea. The monotony of the green meeting the blue of the sky at the horizon is broken by great squares of huge eucalyptus trees and alamos. These are usually planted as windbreaks around a huge park where the house, sometimes palatial, of the owner of an *estancia* (Argentine farm) is located. The park may include a polo field, tennis courts, swimming pool, golf course and landing field. In the loneliness of the pampas, these great *estancias*, which pasture more than 50 per cent of Argentina's livestock—not including sheep—are provided with all the luxuries of modern life.

### "Lighthouse" of the Pampas

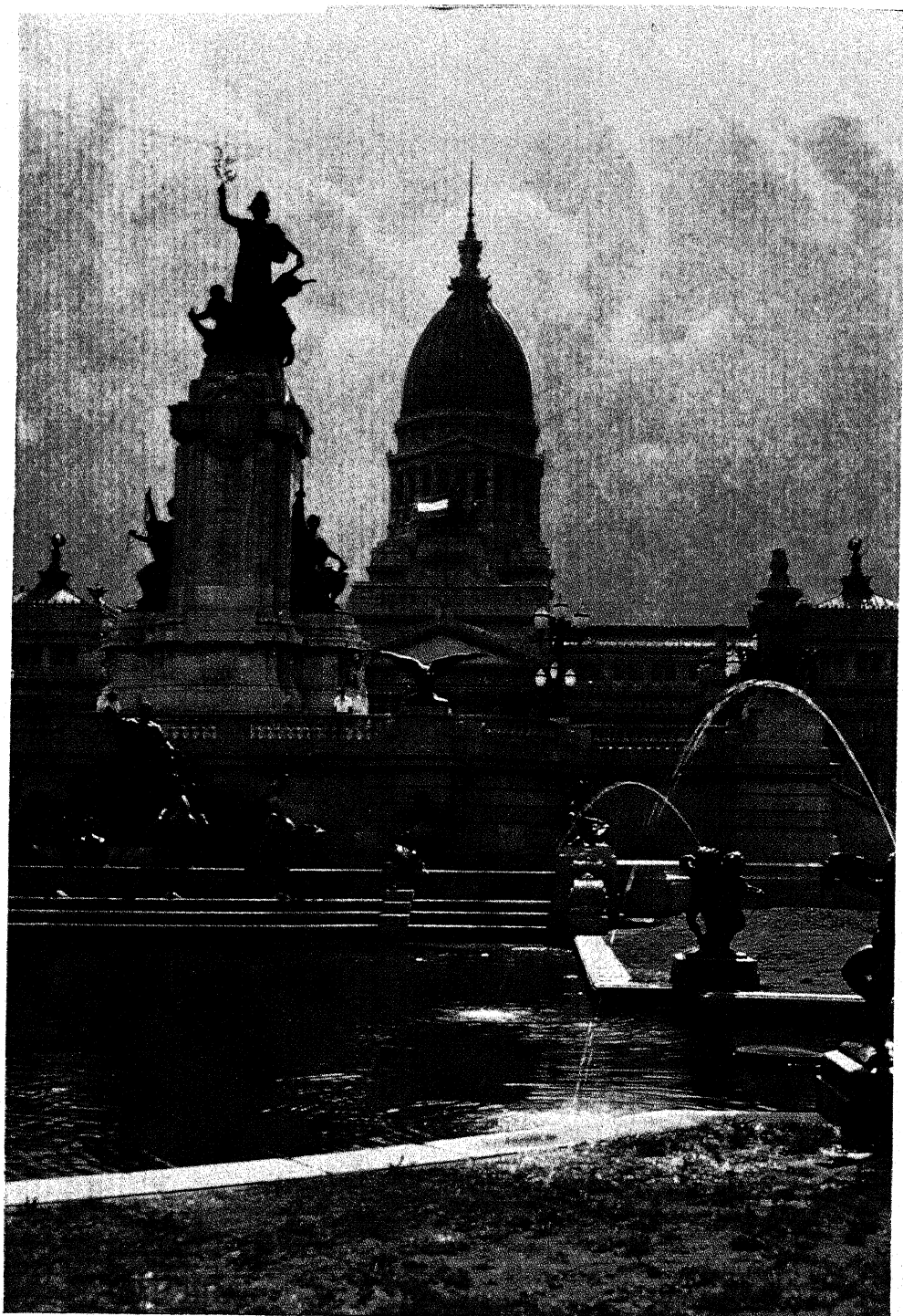
The sameness of the plains is also relieved by the ombu. Some poets have called this tree the lighthouse of the pampas because, as in the nights the stars led the way of the Gaucho, during the day the ombu was a landmark for weary travelers. It has an enormous trunk, and the shade from its great spreading branches protects the tired horsemen from the bright midday sun. In a way, the ombu is the oasis of the pampas. The Gaucho looks to it for relief, much as his Moorish ancestors found succor in the desert "islands" of water and vegetation.

Cyclones cannot blow the ombu down, and neither fire nor drought can destroy it. Many of these trees have witnessed events that happened a hundred years ago, and are still flourishing. The age of an ombu cannot be counted by rings because it produces more than ten rings a year. However, the Argentine Forest Society, after careful study, estimated that one of these trees was at least five hundred years old. As fuel its wood is worthless. Nev-



THREE LIONS

**MODERN RAILROADS** reach even the remote parts of Argentina. Here a diesel locomotive brings a passenger train to a halt at a station in Tucuman, a province in the north.



J. BARNELL, CAMERA CLIX

**PLAZA DE CONGRESO**, the imposing square in front of the national capitol in Buenos Aires. The city is resplendent with public buildings, avenues, plazas, all on a grand scale.



PAN AMERICAN WORLD AIRWAYS

**THE KAVANAUGH BUILDING** in Buenos Aires, an apartment house, is one of the modern structures in which the *porteños* take pride. It faces one of the city's many lovely parks.





BLACK STAR

**ARGENTINE DASH** and aplomb set off the Gaucho costume. The short jacket and the full, pleated trousers—called bombachas—are black; and the wide, massive belt is fashioned of silver.



PHILIP GENDREAU

**FLOCKS OF SHEEP** browse over some parts of the pampas, which provide excellent pasturage. The country is a leader in the production of mutton, lamb and wool, much of it exported.

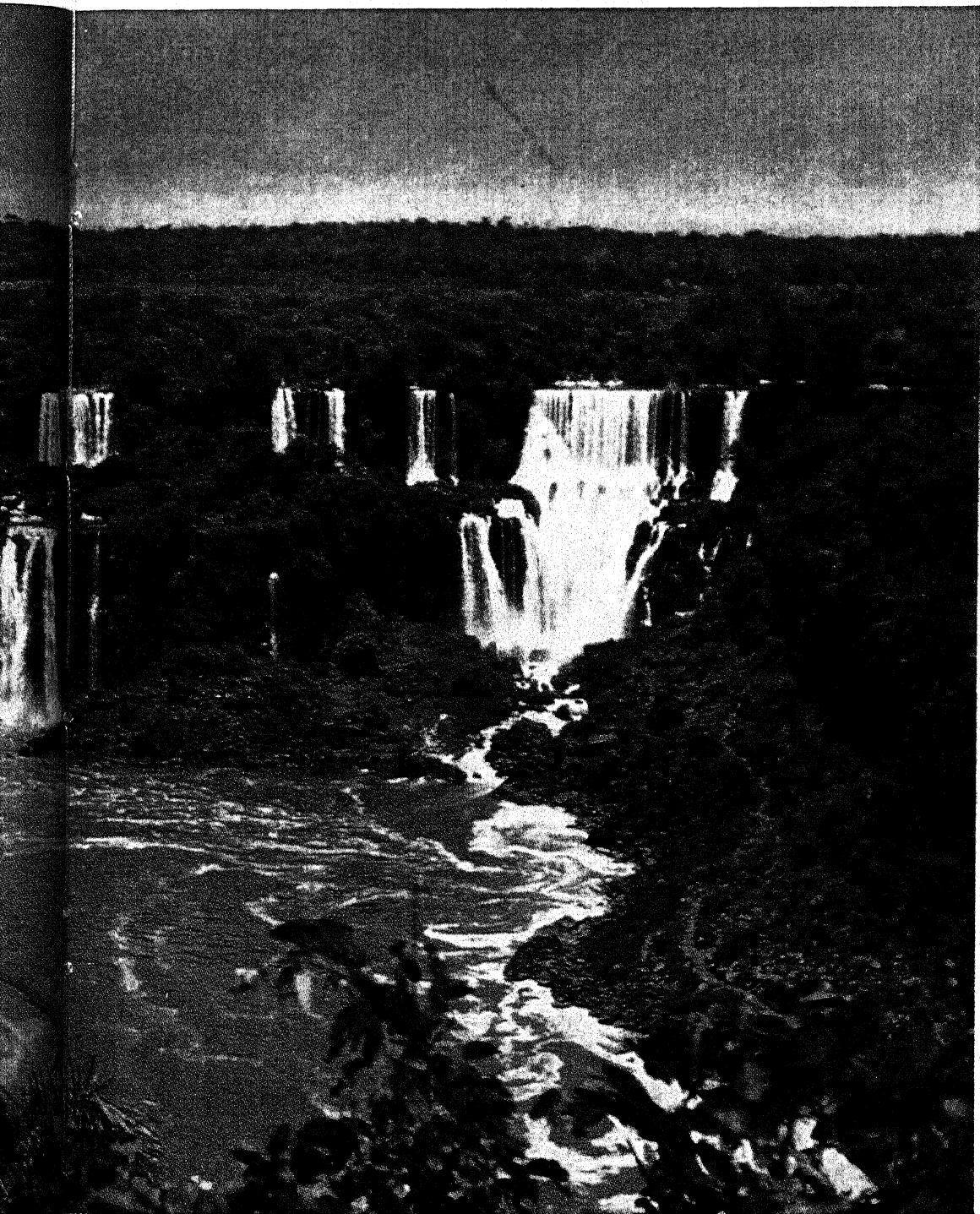


MOORE-MCCORMACK LINES

**BEEF CATTLE** on the way to a slaughterhouse. The animals will provide juicy steaks and roasts for Argentine tables as well as hides and frozen and canned meat for shipment to other lands.



**IGUASSU FALLS** are a magnificent sweep, two and a half miles across, of hundreds of cascades. The drop is in the Parana River, on the boundary between Argentina and Brazil. Tumbling down



MOORE-MCCORMACK LINES

between rocky, forest-clad islands, the foaming torrents fall about 210 feet. Below, the water rushes into a narrow gorge, the Garganta do Diablo (the devil's throat).

## THE SILVER LAND

ertheless, Argentinians are devoted to the few ombus that are left because, like the Gauchos, they are associated with historic events.

The wealth and renown of the pampas have given the outside world the impression that Argentina is a land of flat, open plains. Yet on the west the Andean region, which extends like a big wall—a continuation of the North American Rockies—is of great importance. This cordillera, which separates Argentina from its neighbor Chile, includes a series of small plateaus. Six of its peaks are higher than Mount McKinley (the highest mountain in North America). Soaring above them all is the extinct volcano Aconcagua, 23,681 feet above sea level, the highest point in the Western Hemisphere. Toward the south the Cordillera dips. It is buried in the Antarctic isles but emerges again in the Antarctic Continent.

The lakes region, Bariloche, in the southern part of the Cordillera, is widely known for its beauty and is sometimes called the "Argentine Switzerland." Among the lakes the most important is

Nahuel Huapi. Argentine sportsmen and others from all over the world go to Bariloche for winter sports and trout and salmon fishing. Hotels and other facilities in the region compare favorably with the best to be found anywhere.

Every winter there are international skiing competitions in Bariloche, when champions from such distant places as the United States, Europe and Japan vie with one another. At such times the visitor can hardly believe that he is in Argentina as English, French and German are heard more frequently than Spanish.

In the Andean region, minerals such as silver, copper and gold are found. But these resources have been little developed due to the lack of railroads and other means of transportation.

The semitropical northern plain takes up about one fifth of the whole territory of Argentine. The area extends north into the Chaco Boreal, where the Chaco War between Bolivia and Paraguay was fought in 1935. Numerous unnavigable streams crisscross the moist lowlands of the plain, which is covered with hardwood



BLACK STAR

**THE JOCKEY CLUB** where wealthy horse-racing fans meet in Buenos Aires. However, the gatherings are not society events like the races at Ascot, England. All interest is on the horses.



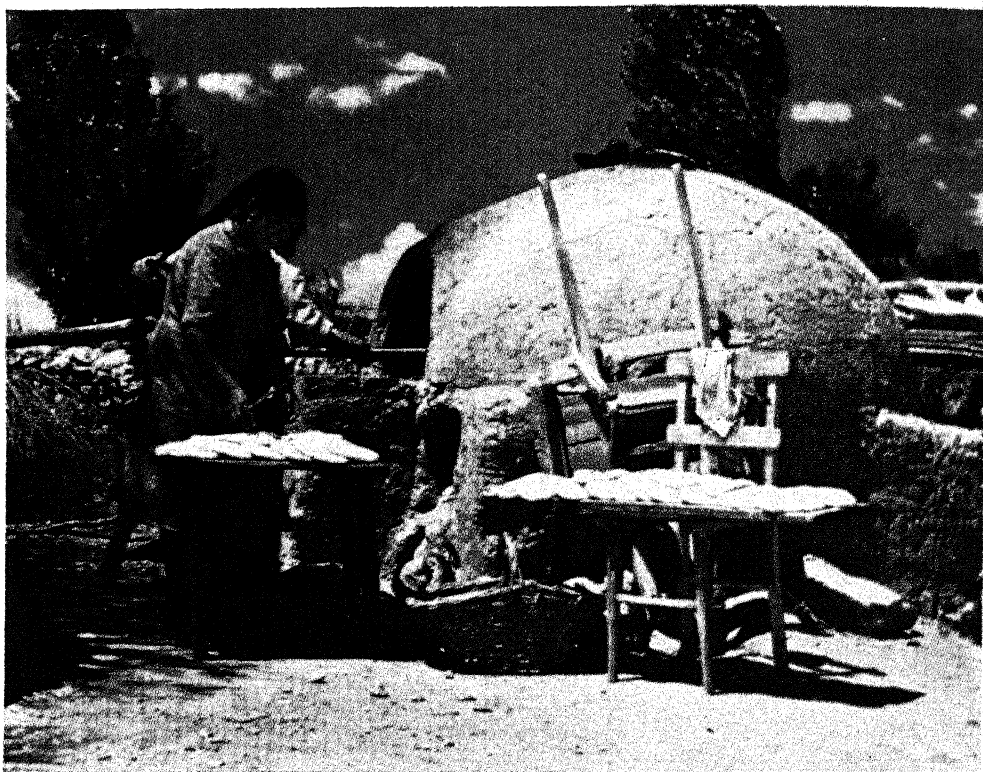


**BUENOS AIRES** is one of the world's busiest ports. An eighteen-mile channel dredged in the broad La Plata estuary allows large ocean-going ships to enter the man-made harbor.

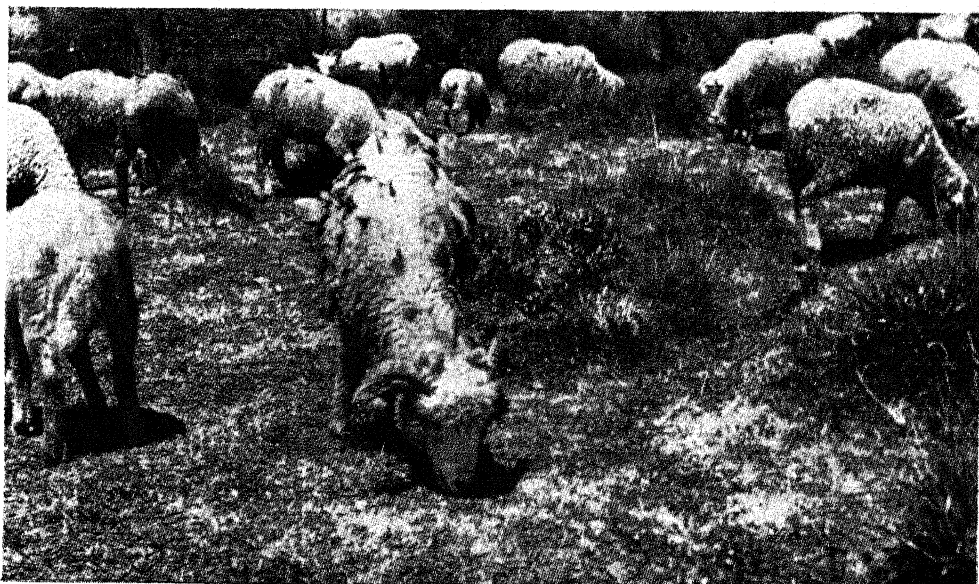


BOTH PICTURES, MOORE MCCORMACK LINES

**THE TOWERING MONUMENT** in the Plaza de la Republica commemorates the founding of Buenos Aires in the 1500's. At left is the wide Avenue 9th of July (birthday of independence).



**AMONG THE INDIANS** still remaining in northwest Argentina, bread is baked in open-air clay ovens. Such an oven, which looks like a big hive, holds a vast quantity of flat loaves.



BOTH PHOTOS, EDWARD S. ROSS

**TUFTS OF YARN** in vivid colors decorate the leader of a flock of sheep, in this case a ram. The amusing custom serves to identify the wether when the flock must be made to move.



PAN AMERICAN WORLD AIRWAYS

**THE GAUCHOS**, the old-time cowboys of the pampas, have largely disappeared. At fiestas, however, ranch folk don the colorful costumes and relive the ways of the romantic past.

## THE SILVER LAND

forests occasionally broken by savannas. Alligators and snakes lurk in the waters, and jaguars quench their thirst there. Yerba mate, or Paraguayan tea, flourishes, as well as quebracho trees, which yield tannin. In this section it never snows and even frost is rare.

In the northeast of Argentina, pushing into Brazilian and Paraguayan territories, is the territory of Misiones. On the boundary with Brazil are the gigantic Iguassu Falls, among the highest in the world. The name is a Guarani Indian word for "big waters." From the irregular brink, two and a half miles long, there are actually hundreds of cascades. They drop between rocky, forest-clad islands, about 210 feet into a narrow gorge, the Garganta do Diablo ("devil's throat"). A main scenic attraction of Argentina, they are well worth the four-day steamer trip up the River Parana, through beautiful country, from Buenos Aires.

Another very productive but much smaller agricultural region lies between the rivers Parana and Uruguay. Because of this location, it is known as Mesopotamia (land between the rivers). It embraces the provinces of Entre Rios and Corrientes, northeast of the pampas. These provinces produce considerable linseed (flax) and fruit, and the best and cleanest wool in the country.

In the province of Mendoza, at the foot of the Andes, and along the Rio Negro, in northern Patagonia, irrigation has conquered the deserts. These two centers are widely known for their abundance of fruits, including wine grapes.

Finally, south of the Rio Negro and extending down to the Strait of Magellan, is Patagonia. Charles Darwin, the nineteenth-century English scientist, called it an "accursed country." Though it is a bleak, unwelcoming land, it was once the cause of disputes between Chile and Ar-



CHARLES PERRY WEIMER

PLAZA SAN MARTIN in Cordoba. A statue of the Argentine hero faces the magnificent cathedral, in colonial-Spanish style. Much of the lovely old city retains a Spanish atmosphere.



CHARLES PERRY WEIMER

**LAKE NAHUEL HUAPI** in Bariloche, the beautiful lake district in the Andes. Nahuel Huapi teems with salmon and trout. The water is deep enough—up to 1,436 feet—for large steamers.

gentina. The stony desert, which rises gradually from the Atlantic to the foothills of the Andes, includes the territories of Rio Negro, Chubut and Santa Cruz. The central part is devoted to sheep raising, and large German and Scotch colonies are there. The southern part is covered with heavy forests. On the Atlantic coast, especially in the vicinity of Comodoro Rivadavia, are Argentina's largest petroleum fields, another source of wealth.

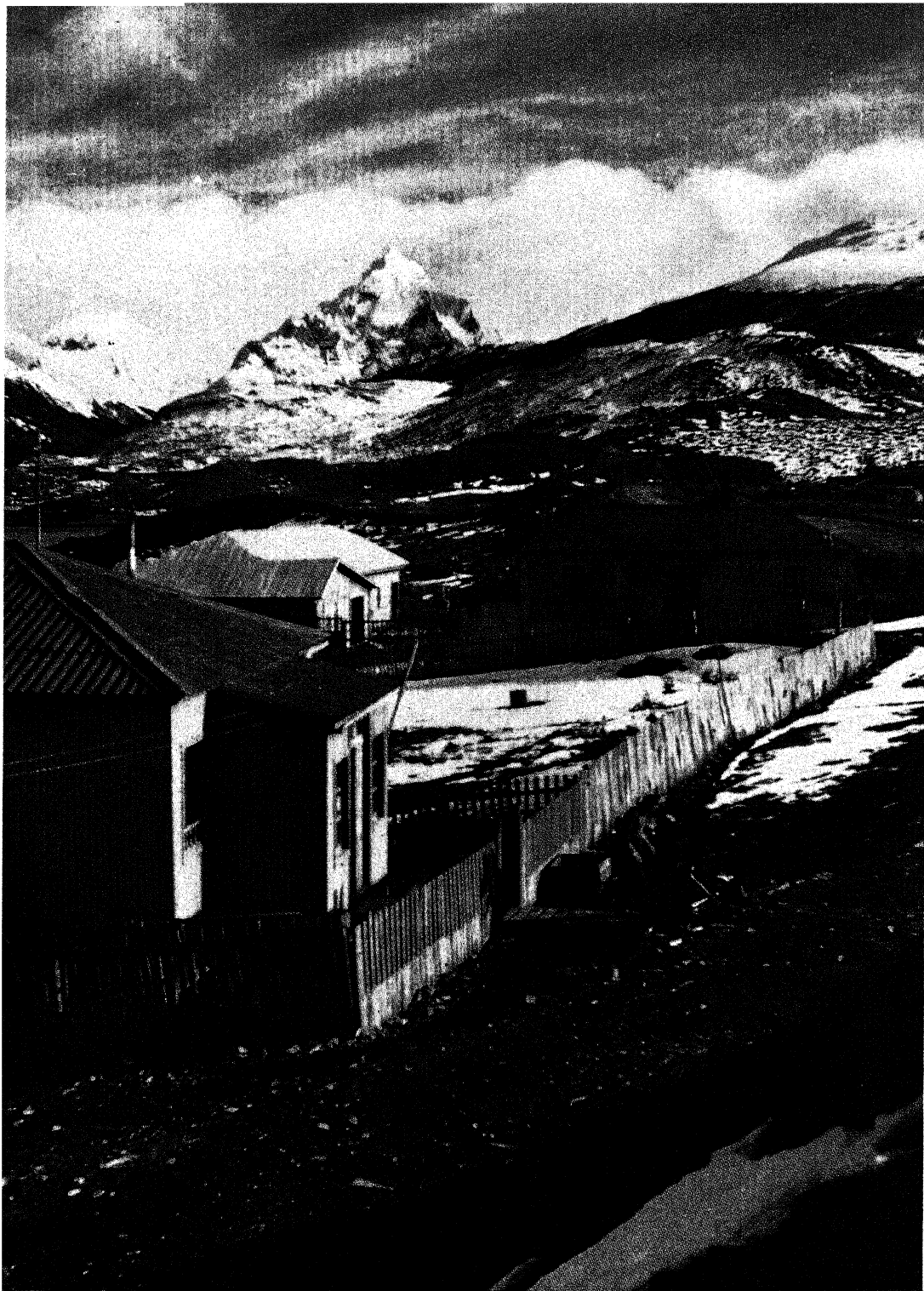
This is only a brief summary of Argentina's general aspect. It is to be remembered that the country lives mostly on and from the pampas. These vast plains have been endowed with an almost ideal combination of fertile soil, warm sunshine and periodic rain. On them grains of first quality are cultivated, and cattle are raised that provide the Argentine beef known the world over.

On the edge of the rich pampas is the proud city of Buenos Aires. It is no longer the neglected back door of the Spanish conquest. More than four hun-

dred years have elapsed since the days when the conquistadors used the small settlement of Puerto de Nuestra Señora de Santa Maria de los Buenos Aires as a bridgehead in their search for El Dorado. No longer does it have the long name that dragged like the capes of the conquistadors. No longer is it the shy hamlet that bowed to the viceroys who were sent from Madrid, dressed in gold and velvet to impress the humble native population. It has grown up. If in the old days it had neither silver nor gold to offer, now it has the riches of the pampas to back it. Today it can look without envy at its Latin American sister cities, because it has become the most important of them all in the Western Hemisphere. Also, it is the largest Latin American city. As a port of the Americas, Buenos Aires is second only to New York. This is so in spite of the fact that it is situated, on the Rio de la Plata, 172 miles from the sea.

The people of Buenos Aires live much as do those of any North American big





HARRISON FORMAN

**WIND-SWEPT USHUAIA** is the southernmost town in the world. A port, it is on Beagle Channel, near Cape Horn, mid the wild fiords and snow-capped mountains of Tierra del Fuego.

## THE SILVER LAND

city. Only they believe in taking their time. The last drop of enjoyment is squeezed from every minute. In a sidewalk café on the Avenida de Mayo, over a cup of coffee, they may spend hours discussing world problems, a soccer game or just looking at people pass by. Usually they make no plans for the future: they live the future, or so they believe. They like to play bridge and canasta. On Saturdays and Sundays, even when it rains, the race tracks of Palermo and San Isidro, which have magnificent surroundings, seem to swallow the whole population. Soccer players are heroes to the masses; and the fashionable set never misses a polo game. All of them love movies. Their sense of humor is highly developed; but, a proud people, they are, on some occasions, overly sensitive.

### South America's "Paris"

Even though the *porteños* take life with ease, in normal times Buenos Aires is one of the world's busiest cities. For many years it looked to Paris for inspiration, and *porteños* like to hear a foreigner compare their city to the capital of France. Buenos Aires is the "least South American," or Spanish, city of the hemisphere, a fact of which the *porteños* boast. Except for some churches, there are very few buildings that remind the visitor of the days when Buenos Aires was a Cinderella. It is a solid city, built on solid bases. Not for a second does it give any impression of impermanence, as some modern cities that have grown rapidly do. Stone by stone, street after street, plaza after plaza—and there are over two hundred plazas—its character has been shaped deliberately. Most of the architecture is European in style, although in recent years skyscrapers have given it a "Manhattan touch."

He who goes to Buenos Aires looking for serenades and romance in its streets will be keenly disappointed. In a leisurely way the *porteños* are active. There are no siestas or midday two-hour shop closing. The executive who has a two-hour luncheon with a large steak or the employee who lingers too long over his demitasse

discussing soccer returns to finish his work no matter how long it takes.

Buenos Aires never sleeps. The *porteños* love night life. Along the Calle Corrientes—Buenos Aires' Broadway—bright neon signs flash until daybreak. Night clubs, cabarets and restaurants have customers until six in the morning. Nevertheless, many of these same people start to work at 9 A.M.

In proportion to its population, the capital has one of the busiest suburban train services in the world. At the 5 railroad stations, 1,800 trains arrive and depart daily. There are 5 subway lines, almost 100 streetcar lines, trolley buses and bus lines. In addition, many citizens travel in a typical *porteño* means of transportation—the *colectivo*—a small bus that races through narrow as well as wide streets.

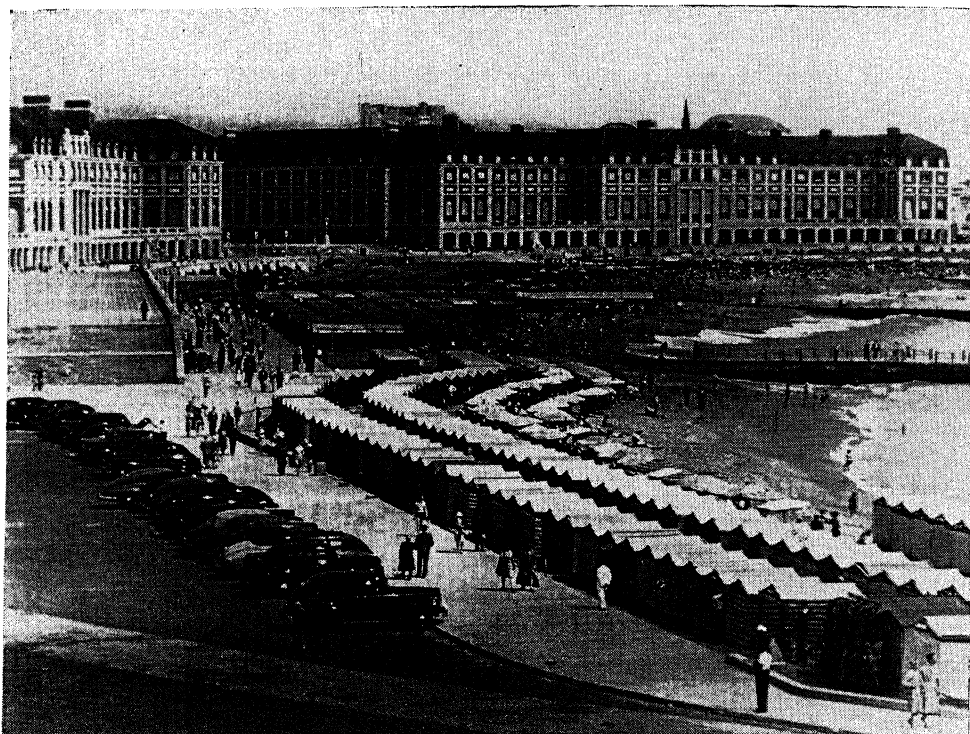
Buenos Aires is both beautiful and very clean. Many of the principal streets and avenues are bordered with lovely flowering trees. In summer its plazas are thronged with strollers.

Traffic lights have never succeeded in Buenos Aires. When they drive, *porteños*, who never rush, do not believe in waiting at a red sign when no other car is in sight. The streets are literally jammed with people; and in some sections of the city, traffic is halted altogether when movies are let out, to avoid accidents.

### Building Is in European Styles

Churches—and there are more than 150—are the only landmarks that have escaped the city's growth and rebuilding. Modern apartment houses and office structures, following the styles of twentieth-century German and French architecture, are constantly being erected. The city's hotels compete with the best anywhere. Under Avenida 9 de Julio, rival to the claim of being the widest and the shortest thoroughfare in the world, there is a underground garage providing parking space for two thousand cars.

Greater Buenos Aires has a population of close to 5,000,000 inhabitants, and no other Argentine cities compare with it. Rosario, on the River Parana, is the sec-



BLACK STAR

**AT MAR DEL PLATA**, fashionable seaside resort, cabanas by the score almost hide the beach. In the background is the enormous Casino, said to be one of the largest in the world.

ond port in importance. In some ways, Rosario reminds one of the proud capital of Argentina as it was around 1900. Cordoba is one of the most beautiful of the Argentine cities that have kept the air of colonial days. Its cathedral is a model of the architecture of that time. The province of Cordoba is in the central part of Argentina (northwest of Buenos Aires). It is a summer-resort haven. A picturesque mountainous region, with lovely lakes, it yearly attracts great numbers of visitors in search of rest or to regain their health.

The northern city of Tucuman is the capital of the province of the same name, the "Garden of the Republic." It is the center of the rich sugar-cane industry. The life of the city is quiet and sedate and is thus scorned by *porteños*. Tucuman is nonetheless proud, and rightfully so, of its native society. To attend a social reception in Tucuman is like going back to the days when Argentina was struggling so

desperately for independence from Spain.

Santa Fe, north of Rosario, is important chiefly as a grain-producing center. Mendoza, in the foothills of the Andes, attracts visitors from far and wide for the yearly Fiesta of the vintage. An established feature of this festival is a parade of decorated chariots.

In the far north are Salta and Jujuy, capitals of the provinces of the same names. There one may see a few remains of the Indians in Argentina and their influence.

Finally, but not least important, is the wealthy province of Buenos Aires. Its capital is La Plata, a modern, well-planned city. In spite of its being only forty miles from the city of Buenos Aires, after many years La Plata has finally managed to detach itself from any *porteña* influence. South of Buenos Aires Province is Bahia Blanca, the important Atlantic port where the Argentine Navy is based.

There is one city that bursts into activ-

## THE SILVER LAND

ity for four months a year and then slumbers during the remaining eight months except on Saturdays, Sundays and holidays. This is Mar del Plata, Argentina's fashionable seaside resort. From the beginning of December until the end of March, vacationing Argentinians try to stay there at least a week, while those who can afford it stay for the whole season. For miles along the coast one excellent beach follows another. The specialty of its restaurants is sea food, fresh caught from colorful barges that sail along the shore. There are lovely summer homes, and clubs and hotels similar to those of the French Riviera. The spectacular Casino is said to be the largest in the world.

Most Argentine cities are like islands placed in the pampas or near the mountains. To go to one from the other, the traveler must cross endless plains. Here small towns are scattered and here the *paisanos* live. These people are successors of a sort to the Gauchos, who have vanished from Argentine life.

Today Argentina has three distinct divisions: its plains and mountains, its inland cities, and Buenos Aires; just as in the old days there were the Gauchos, the *criollos* and the *porteños*. The plains and the mountains provide the wealth; the in-

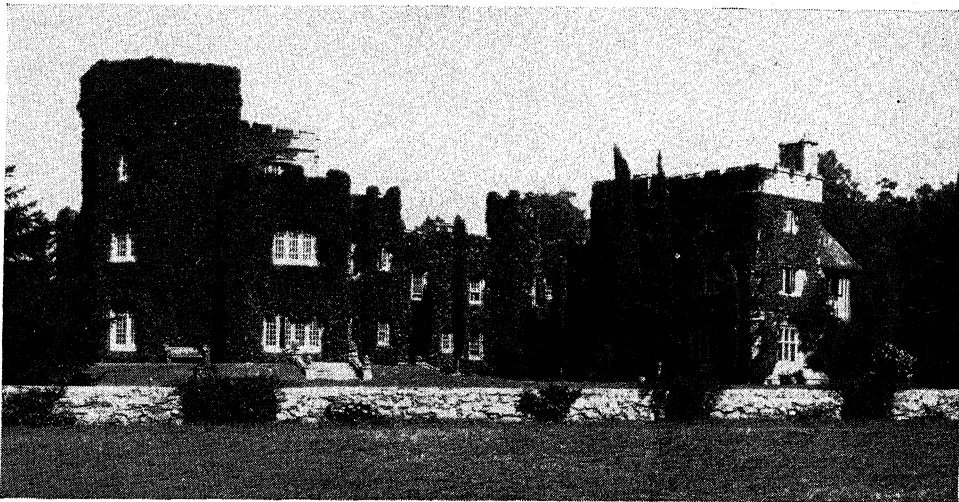
terior cities preserve the old Spanish traditions; Buenos Aires is the cosmopolitan capital that absorbs the foreigner and foreign things that come to it. But it no longer bows to the foreigner. If it accepts him, it draws him into its own personality.

The Argentinians themselves are a democratic people, though they also know the heavy hand of dictatorship. This was especially true under Juan Peron, who ruled the land from 1946 until 1955.

Argentinians are a combination of sadness, pride, keen sense of humor and generosity. As dashing as the early conquistadors, they should wear long capes; and like the early Indians, they cherish the soil of their birthplace. These are the people who built the nation about which the English historian F. A. Kirkpatrick wrote:

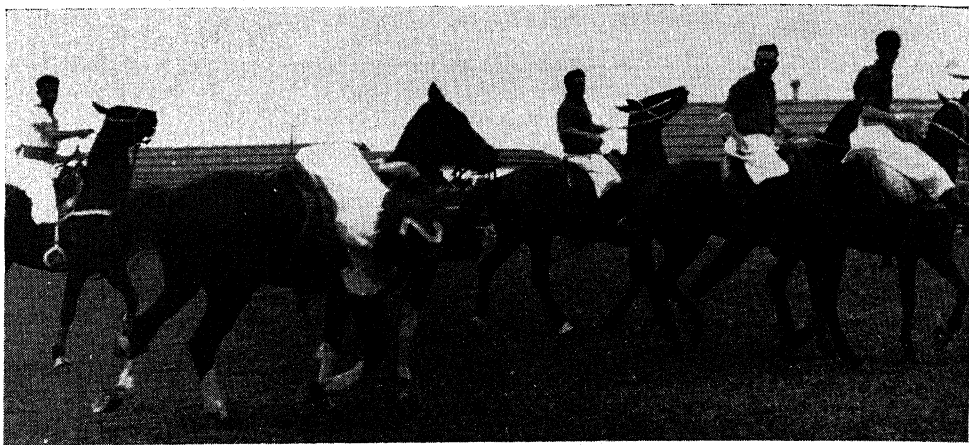
"This country is destined by nature to be the seat of a great civilization, mainly European in character. That destiny has been in great part fulfilled and is in process of further fulfillment. It has in its favor the enthusiastic belief and pride in the country felt by every Argentine born and by thousands of Europeans who have made their home in the country."

BY ROBERTO MUJICA-LAINEZ



CHARLES D'EMERY, MANUGIAN STUDIOS

**THE VINE-COVERED WALLS** of a well-to-do rancher's home emphasize its look of an English manor house. Argentina's greatest source of wealth is her vast stock-raising domains.



HARRISON FORMAN

**PLAYING PATO**, a favorite game. The ball has handles so that the player, leaning out of his saddle, can grasp and toss it. "Pato" means "duck." The game was once played with a live duck.

## ARGENTINA: FACTS AND FIGURES

### THE COUNTRY

Is bounded on the north by Bolivia and Paraguay; on the east by Paraguay, Brazil, Uruguay and the Atlantic Ocean; on the south by Chile and the Drake Passage (the conjunction of the Atlantic and Pacific oceans) and on the west by Chile. The area, excluding the antarctic territory claimed by Argentina, is 1,078,769 square miles. The population is about 18,379,000. Spanish is the language of the country.

### GOVERNMENT

The chief executive of the Argentine Republic is the president. He and the vice-president are directly elected by popular vote for 6 years according to the Constitution drafted in 1949; the president may be re-elected. Legislative power is vested in a bicameral Congress consisting of a Senate of 36 members and a Chamber of Deputies. Members are elected for a 6-year term by popular vote, one third of the senators and one half of the deputies retiring every three years. Suffrage is universal and compulsory. There are 17 provinces, 7 territories and 1 federal district. Each province elects its own governor for 6 years and has its own elected legislature.

### COMMERCE AND INDUSTRIES

Argentina is essentially agricultural and pastoral. Its great wealth comes from cattle raising, in which it ranks fourth in the world; it stands first as an exporter of meat and allied products. Grain production, including wheat, corn, linseed, oats, barley, rye and sunflower seed, is a major industry as are also meat refrigeration and flour milling. Quebracho, mate, lumber, tung nuts and castor beans are grown in the densely wooded and swampy northern portion, and dairying and fruitgrowing are carried on especially in the Buenos Aires vicinity. Argentina is the world's largest source of tannin. Mining is relatively unimportant, although gold,

silver, copper, coal, iron and petroleum are found in limited quantities. Chief exports: meat, hides, wool, grain (including wheat, corn, flour and linseed), vegetable oils, oleaginous by-products, fresh fruit and forest products. Imports: textiles, chemicals, machinery and vehicles, iron and steel products, fuels and lubricants, food and timber products.

In the field of purely industrial enterprises, government-owned companies are engaged in the manufacture of small cars, light trucks, motorcycles and airplanes.

### COMMUNICATIONS

All transportation is controlled by the Ministry of Transportation. Argentina has 18 railways that total approximately 28,500 miles. It has 30,400 miles of paved highways plus 89,100 miles of other roads. There are 4 domestic airlines. A large merchant fleet of more than 2,000 vessels places Argentina in the front ranks of world maritime powers. There are more than 928,700 telephones, 55 broadcasting stations, several television stations and nearly 4,400 post offices. All-American Cables provides service between Argentina and the other Latin-American countries and the United States.

### RELIGION AND EDUCATION

The dominant religion is Roman Catholic, and until 1955 it was state supported. Freedom of worship for other faiths is allowed. Education is free and compulsory from the age of 6 to 14. There are about 15,874 primary schools; 2,101 secondary, normal and special schools; 1,132 incorporated secondary schools and 6 national universities.

### CHIEF TOWNS, POPULATIONS

Buenos Aires (capital), 3,367,700; Rosario, 761,000; Cordoba, 352,000; La Plata, 325,000; Tucuman, 172,000; Santa Fe, 168,000; Mendoza, 110,200; Parana, 83,800.



# THE GREAT WHITE SOUTH

## *Antarctica Is the Coldest Region of the Earth*

Fascinated by the lure of the unknown, courageous men in every age have penetrated strange territory and crossed uncharted seas, until to-day it seems as though no corner of the world were left unvisited. But if we look at a map of the southern hemisphere we shall see that the South Pole is located on a great continent, Antarctica, much of which is still absolutely unknown. The Pole itself has been reached by the explorers Amundsen, Scott—who lost his life on the way back—and Admiral Richard E. Byrd (USN ret.). For nearly a hundred years before the first Byrd expedition there had been no American expeditions to the great frozen wastes of the Antarctic. Then, in 1928, Admiral Byrd took the first of his journeys (he has led three expeditions since) southward. In 1947 Commander Finn Ronne (USNR) led a mapping expedition to the shores of the Weddell Sea. Many nations claim parts of the area, including the United States, England, Chile, Australia, New Zealand, Argentina and Norway.

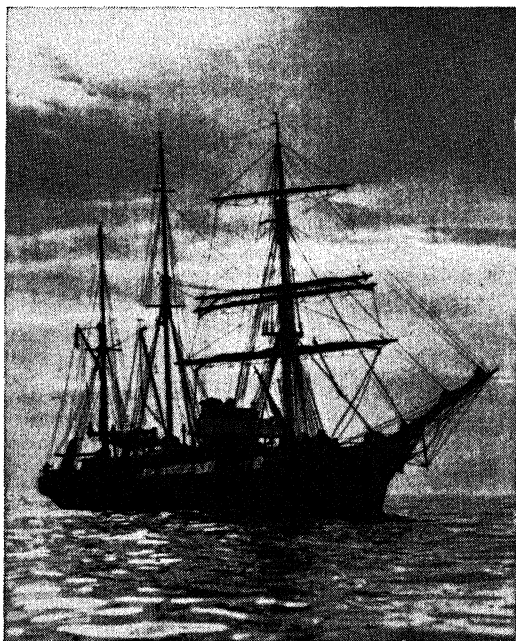
**A**N inhabitant of Mars, looking at the earth through a telescope, would see no great difference between its two polar regions, for both would, at all times of the year, appear to him as circular patches of white. There would be only one noticeable difference: the circular region at the southern end would be rather larger than that at the northern end.

Yet to us, now that both poles have been reached, and the Arctic and Antarctic regions to some extent explored, the difference is marked. The Arctic is a deep ocean with large land masses surrounding it, while the Antarctic is a continent surrounded entirely by deep sea—a fair-sized continent, too, for its area is reckoned at about five million square miles. It may prove to be the highest land mass on the

globe, for that part of the interior that is known is high plateau and mountain country, five to ten thousand feet above sea level, with some peaks much higher.

The whole of this desolate tableland is covered to unknown depths with snow and ice which have been accumulating for thousands of years and which are constantly pushing outward into the sea in

the shape of enormous glaciers and a coastal fringe called barrier ice. Another name for this formation is shelf ice, because it gradually works its way into deep water until it makes a shelf along the coast and floats on the sea. In many places the ice extends so far out that it is impossible to tell where the coastline really is. The edge of the barrier, or shelf ice, may look like a stupendous wall from twenty to one



WIDE WORLD

**BEAR OF OAKLAND**, one of the ships used by Admiral Byrd on his third Antarctic expedition.



EXPEDITIONS POLAIRES FRANÇAISES

**A WELCOMING COMMITTEE** on the barren shore of the Antarctic. Penguins are the only animals of any size that live on the land, though the waters teem with whales and seals.

## THE GREAT WHITE SOUTH

hundred and eighty feet high. In summer when the pack ice of the sea breaks up, the barrier throws off icebergs of a size and shape unknown in the northern hemisphere. This tremendous ice flow shows vividly how cold Antarctica is; it is a continent still in the grip of the ice age from which most of the rest of the earth has long been released. Greenland is the chief exception.

Because of the severity of the climate, exploration is beset with appalling hardships. Looking at the map on page 210, you will see that the continent itself is almost entirely within the Antarctic Circle, but in winter—that is from April to August—the encircling belt of pack ice extends much farther north and makes it impossible to sail into the Antarctic much beyond the South Shetland Islands.

### *Captain Cook Sails Far South*

The first man to sail within the Circle was the great English navigator Captain Cook, who crossed it more than once on his voyages. In 1774 he held the record for "farthest south" and had effectively disproved the existence of the fabulous southern continent in which sixteenth-century geographers believed; they thought Tierra del Fuego was part of the unknown land and that it extended from there to the Pole.

Fabian von Bellingshausen was sent out by the Russian Emperor in 1819 and, circumnavigating the entire continent, he first discovered its unity and named Alexander I Land for his sovereign. After him came sealers and whaling captains, who pushed south every summer from British and American ports in search of oil and skins and did much to chart Antarctic seas. James Weddell, John Biscoe and John Balleny—all Englishmen—were the most successful explorers among the various nationalities of whalers.

### *A Landing Is Made*

An increasing number of expeditions now went to the Antarctic; a Frenchman, D'Urville, an American, Charles Wilkes, and an Englishman, James Clark Ross—all naval officers—were at work there in

the years between 1835 and 1845. Ross made an especially fine record of discovery; the Ross Sea, South Victoria Land, the Great Ross Barrier and three high mountains were all first sighted by him. A Norwegian, Borchgrevink, was with the first party which actually landed on the Antarctic continent and in 1899 he led the first expedition to spend the winter in Antarctica, at Cape Adare.

### *Amundsen as First Mate*

At about the same time, in 1897-99, a Belgian group was active. This party was led by Adrien de Gerlache, also a naval officer. With his expedition, the period of truly scientific exploration began. The first mate on the Belgica, Gerlache's ship, was Amundsen, who was to discover the South Pole.

It was not until the twentieth century that the sea voyages were supplemented by land expeditions. A German scientific party under Drygalski discovered and explored Kaiser Wilhelm II Land in 1902. In 1901-04 Captain Robert F. Scott of the British Navy sailed to the Antarctic in the Discovery. He went to the Ross Sea, which has been the way of approach for most expeditions since, and made the first real attempt to reach the South Pole. With him was Sir Ernest Shackleton, who in 1908 led an expedition of his own and came within ninety-seven miles of the goal. Another man famous in the story of Antarctic exploration is Sir Douglas Mawson, who reached the South Magnetic Pole and did valuable work in Adélie Land with his Australian Expedition, from 1911 to 1914.

### *The Race for the Pole*

Meanwhile, England was not the only nation interested in finding the South Pole and when Scott went south on his second expedition in 1911 he was running a race with the Norwegian party under Roald Amundsen. From the Great Barrier on the shores of the Ross Sea they followed different routes, which are marked on the map. Amundsen with his dog teams reached the pole first, on December 14, 1911; over a month later Scott worked

## THE GREAT WHITE SOUTH



AUSTRALIAN NEWS & INFORMATION BUREAU

**CLOTHING** for bitter weather. Several thin layers are better than one thick layer.

his way to the spot, and to his bitter disappointment found awaiting him a letter from Amundsen. It was on their nine-hundred-mile march back from the pole that Scott and his four brave companions perished of cold and hunger. One of them, Seaman Evans, died as the result of a fall. It was Oates who quietly walked away into the snow to die, hoping to give his leader a greater chance of life.

### *Later Exploration*

The pole had thus been reached more than once in spite of overwhelming hardships, but there remained mile on mile of territory where no human being had ever set foot. Sir Ernest Shackleton met with disaster in the ice-packed Weddell Sea in 1915 but carried on the task of exploration until his death in 1922. A new factor in Antarctic work was introduced when Commander Richard E. Byrd of the United States and Captain Sir Hubert Wilkins of Australia began using airplanes for observation and mapping. Wilkins made the first flight in Antarctica in 1928; the next year Byrd (afterward created Rear Admiral in recognition of his polar exploits) flew over the South Pole. One great object of geographical interest is to learn whether Antarctica is really one continent or two, divided under the ice pack between the Weddell Sea and the Ross Sea. Sir Douglas Mawson led another Australian expedition in 1929, using his ship as a base and making short flights in a small plane.

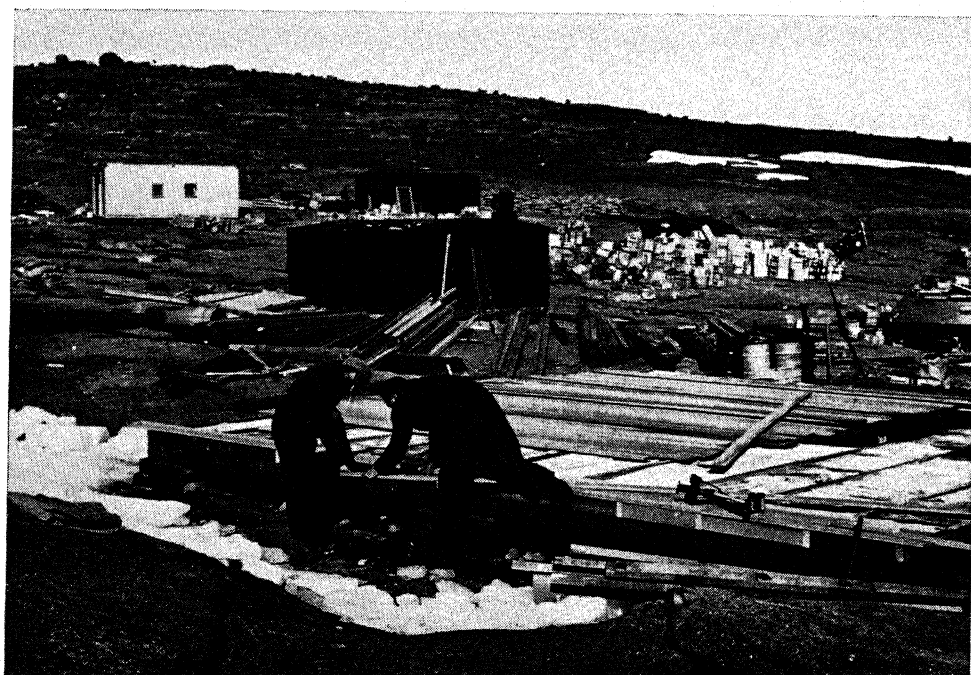
### *An Amazing Discovery*

As the airplane has been used more and more, the terrible difficulties of slow travel by sledge no longer play an important part in expeditions. Also, with planes, explorers have learned more about the once hidden continent in a few years than many patient workers were able to find out during a century and a half. In 1946, for instance, flyers discovered an astonishing forty-mile-wide area of ice-free lakes in the Knox Coast section. It seems likely that these lakes are fed by hot springs.

But the terrific hazards are there none



**A FRESHLY KILLED SEAL** is hauled in to feed the dogs of an Australian research station. The line of crushed ice shows where a crack developed and the edges pressed together.



PHOTOS, AUSTRALIAN NEWS & INFORMATION BUREAU

**LAYING THE FLOOR** for an engine hut at the Australian station. The rocky ground, clear of snow for a time, makes a firm foundation for buildings able to withstand blizzard force.



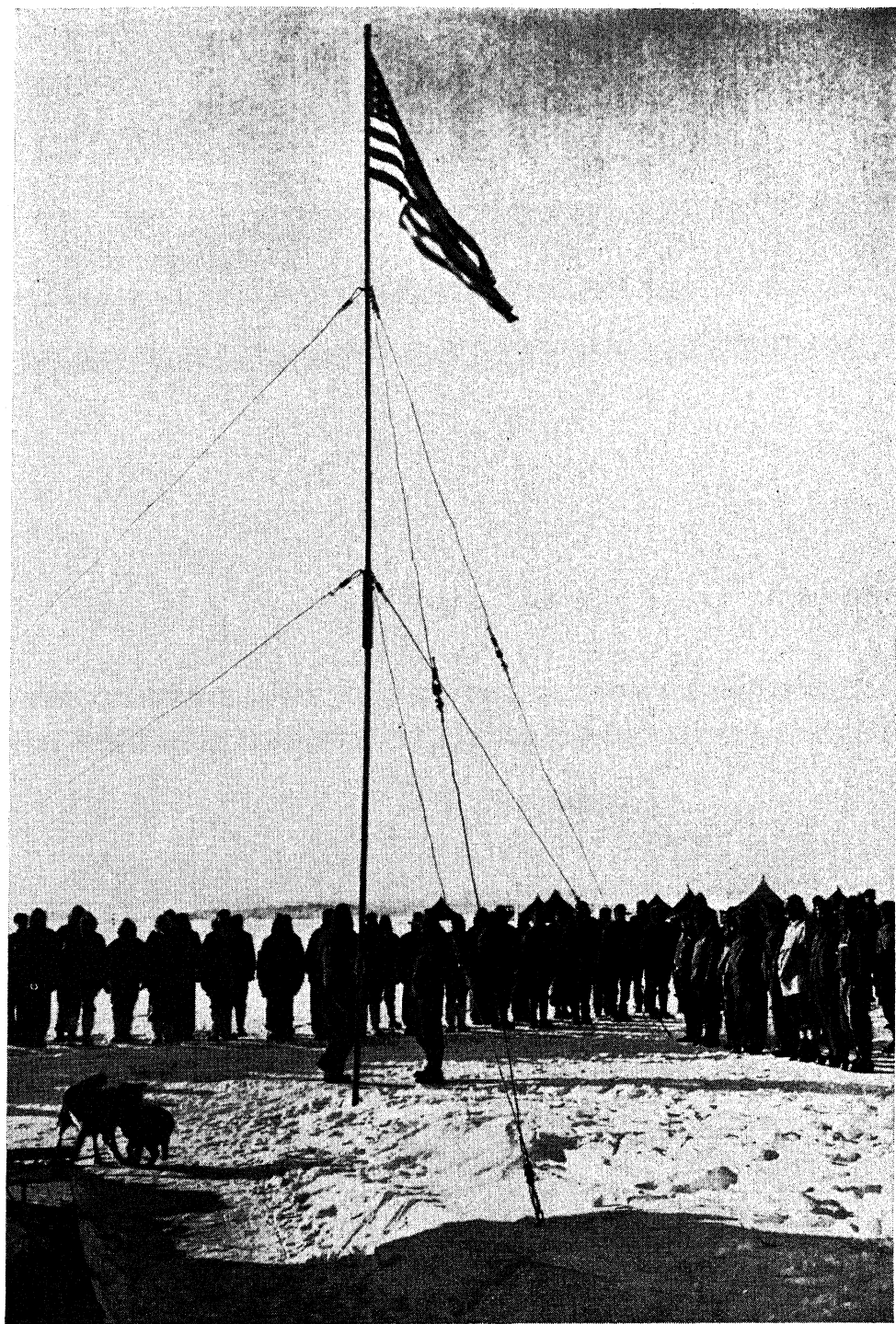


U. S. NAVY

**LITTLE AMERICA** yields the secrets of its life and terrain to cameramen of the U. S. Navy expedition of 1947. Photographer above is roped for safety as he films a yawning crevasse.

the less, and climate is responsible for most of them. At one time this land of ice had a warm climate, for coal deposits exist and fossilized leaves of pine trees and ferns have been discovered. But at present the cold is incredible. Even in summer, when the sun is constantly above the horizon, the air temperature inside the Antarctic Circle never rises above the freezing point. In January 1909, when Shackleton was within reach of the South Pole, a three-day blizzard was made worse by a temperature of  $70^{\circ}$  below zero. The Byrd Expedition, on its return to America, reported a temperature even lower— $72.6^{\circ}$ . In the Arctic region rain falls at times during the short summer, but in the Antarctic the only precipitation is of snow, usually in fine grains that cut and sting like dry sand. The wind is hardly ever still; frequently it blows a heavy gale commonly rising to hurricane force; then its fury is appalling. When the

Swedish Expedition under Dr. Norden-skiöld camped on Snow Hill Island in 1902-03 they chose a site for their station which they believed would be sheltered from the worst of the wind. Yet a gale from the southwest picked up a large bag of heavy fossils and blew it twenty yards; another time a big whale boat was lifted and flung the same distance, landing against a mass of ice, and on examination it was found that the zinc plating had been stripped completely off. This particular gale carried away the wind gauge, so it can only be said that the air was moving at over a hundred miles an hour. Admiral Byrd's party experienced one gale in which the wind reached the terrific velocity of 120 miles an hour. Mawson's men learned to guess the velocity from the tone of the wind's roar outside their hut. During such storms the air becomes so charged with electricity that the metal parts of instruments give distinct shocks



U. S. NAVY

**STARS AND STRIPES** hoisted by members of Byrd's fourth expedition to Little America were left flying because evacuation took place during the six-month period of Antarctic daylight.



U. S. NAVY

**ICE FLOES** surround ship on United States Antarctic expedition, 1954-55. On this trip the bay named for Admiral Byrd was surveyed and declared the best site for future operations.

when touched, while the tips of men's fingers glow with brushes of light in the darkness.

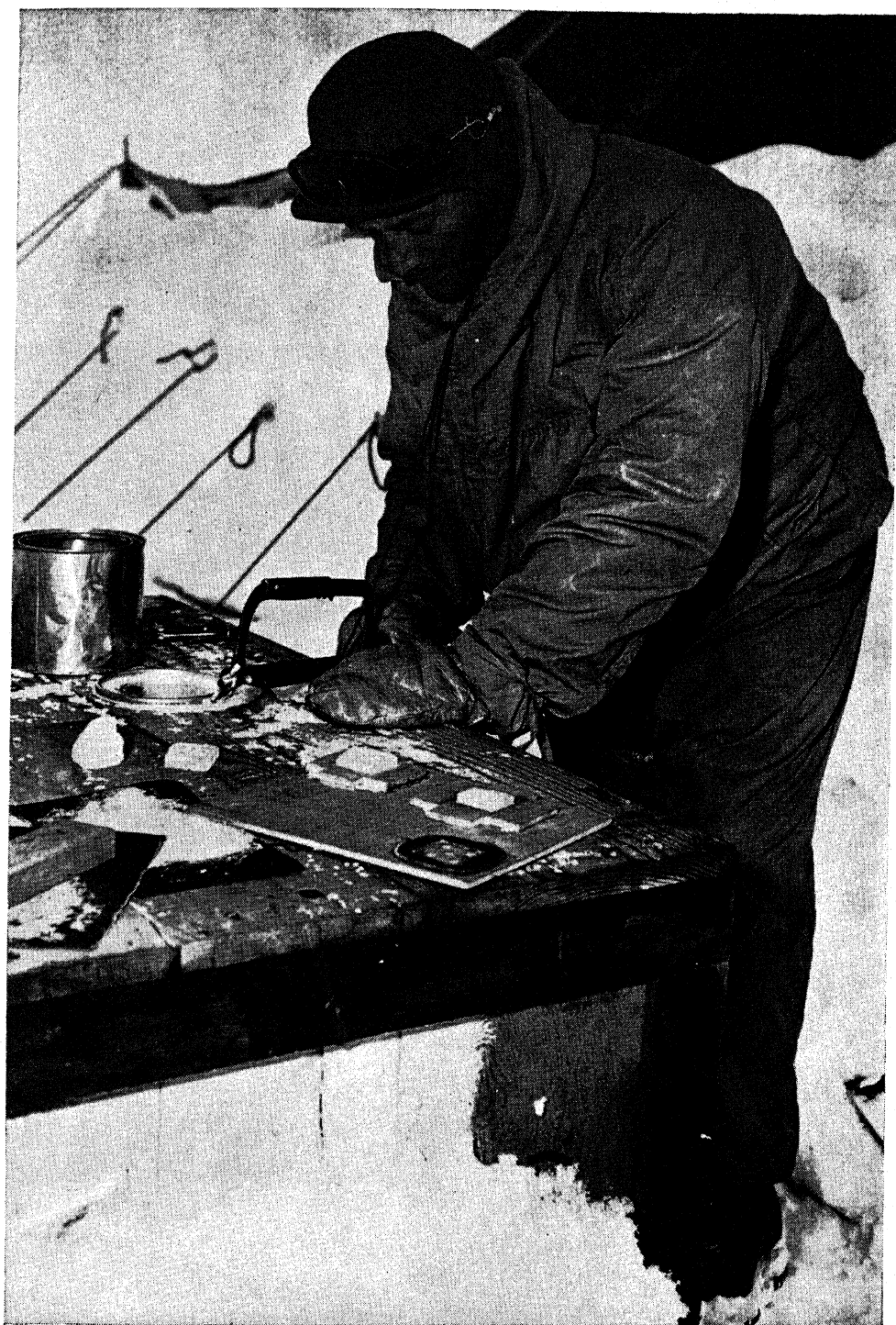
Byrd led another expedition to Antarctica in 1933. He dug out from the snow Little America, his former base, and there fifty-six men spent a year. They mapped out much uncharted territory.

In January 1939, the Americans Lincoln Ellsworth and J. H. Lymburner flew over a vast Antarctic expanse, which they claimed for the United States. In November of that year Rear Admiral Byrd led his third expedition toward the South Pole. The expedition explored thousands of miles of territory, discovered five new mountain ranges, and conducted much scientific research. The party returned home in 1941. Admiral Byrd's fourth expedition to the Antarctic was in 1947.

For the first time in a century, France sent an expedition of explorers and scientists to Antarctica in January 1950, under the leadership of André F. Liotard. They established a permanent base on Adélie Land, which faces the Indian Ocean. This territory was discovered by

Admiral Jules Dumont d'Urville in 1840. He named it for his wife and claimed it for France. Adélie Land is in the shape of an elongated triangle, with its apex at the South Pole and its base on the ice-blocked southern ocean.

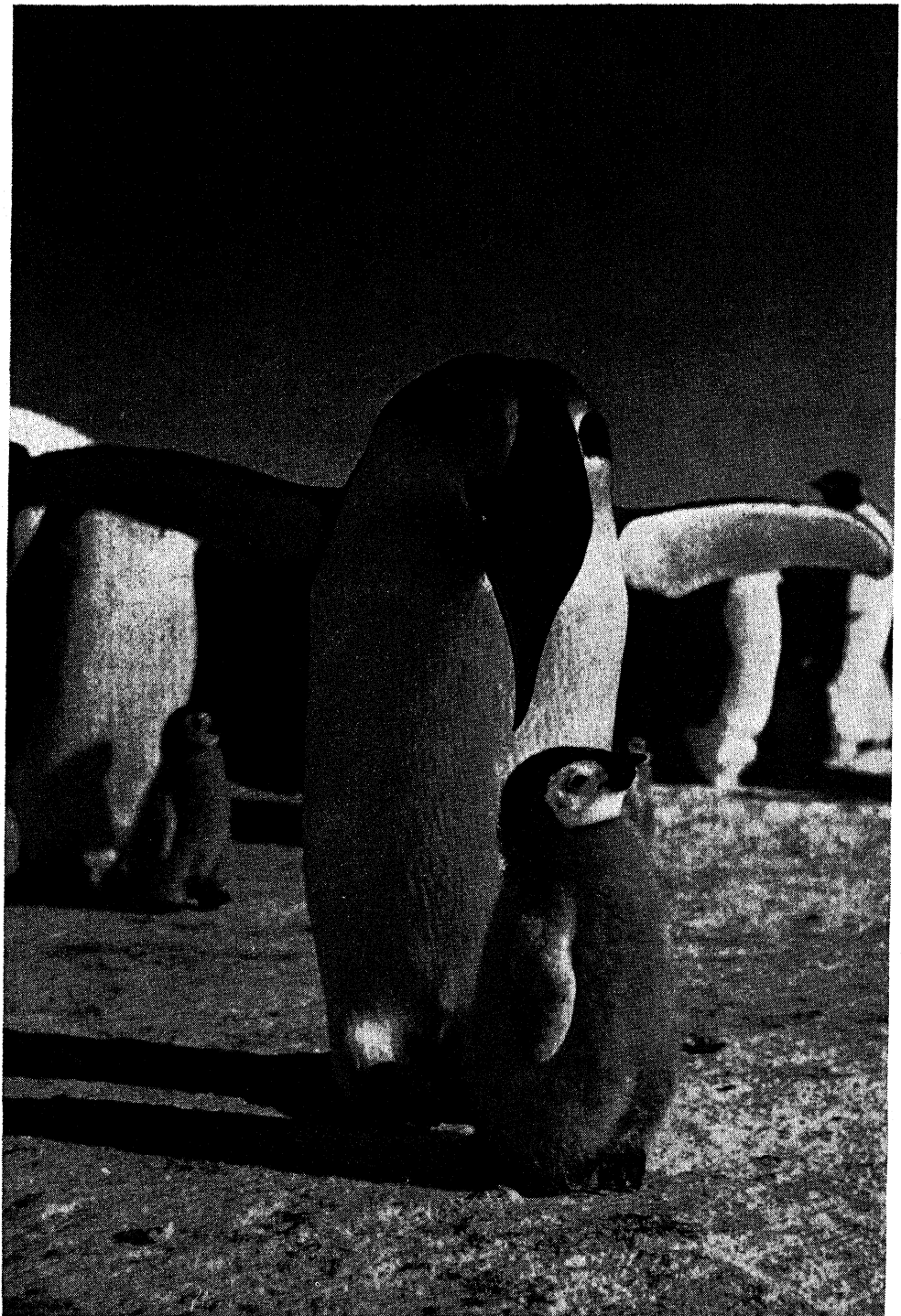
Though the Liotard expedition was harassed by some of the world's worst weather and was cut off from outside supplies for nine months, it succeeded in mapping most of the uncharted terrain of Adélie Land. A tiny base was set up, christened Port Martin for a member of the expedition who died en route. Permanent radio and weather-reporting stations were established; and members gathered valuable information on mineral resources, geological structure, seismic conditions and the wildlife—mostly penguins and sea gulls—of the area. Meteorologists recorded data, unobtainable before, on wind velocity, air-mass movements and general atmosphere conditions. Scientists believe that this little-known corner of the world exerts a profound influence on the climate of the whole Southern Hemisphere. The area's greatest val-



U. S. NAVY

**LITTLE SLABS OF ICE** are prepared for examination under a microscope. They can reveal amazing bits of information. Sometimes tiny forms of life are imbedded in the ice.





EXPEDITIONS POLAIRES FRANÇAISES

**AN EMPEROR PENGUIN** spreads its flightless wings like arms above a cuddly baby. Emperors have no fear of the Antarctic. They breed, and hatch their eggs on the edge of the sea ice.



## THE GREAT WHITE SOUTH

ue now is for weather observation.

We have all heard of or seen the northern lights, or aurora borealis, which are sometimes visible as far south as Florida. The southern lights are fully as splendid and wonderful; now they are like golden curtains, and again they form racing rays of green, rose and violet, making the perpetual winter night luminous with their soft brilliance. When winter is over and the sun comes above the horizon once again, its light turns the snow fields into sheets of dazzling brightness. For the Antarctic is as beautiful as it is inhospitable. If it threatens venture some men with hardship and death, it also rewards them with an unforgettable experience of strange magnificence. To stand on the pack ice at the foot of the great barrier and look up is to gaze upon sheer towering cliffs of clear ice, which shades from sparkling white, pale green and radiant opal on the surface to silver, ghostly blue and inky black in the depths of some yawning crevasse.

### *Smoke and Flame Amid the Ice*

The most striking thing about the Antarctic continent is its volcanic structure. There are many extinct volcanoes, and Mount Erebus, which rises to a height of 13,200 feet, is still active. Its crater is a half mile across and 900 feet deep. It throws out vast volumes of steam and sulfurous gas, yet the temperature near the summit has been noted as 50 degrees below zero.

Because of the extreme cold and the great distances that separate it from other continents, Antarctica has none of the wonderful life of the far north—musk-oxen, wolves, polar bears, Arctic hares and foxes, and birds. In summer those low-lying plains are covered for a few weeks with a blaze of flowers, but on the Antarctic continent there grows not so much as a blade of grass, and vegetation is represented only by a few mosses and lichens. There are no land-dwelling animals at all, and few insects. Within the mighty ice cliffs that ring it round, the great central desert of ice is the most lifeless, desolate area to be found anywhere

on the face of the planet.

Yet although animals cannot exist on the ice cap, the cold waters surrounding it teem with life. Fish are plentiful, whales spout in the open leads of water and colonies of seals lie basking on the ice floes. There are sea birds by the thousand—penguins, petrels and gulls.

### *Antarctica's Unbirdlike Birds*

The penguins are by far the most interesting, because, as a great naturalist has remarked, "they are the most unbirdlike of birds." For one thing they cannot fly, but on the other hand they are magnificent swimmers. Their small, stiff, scaly wing stumps serve as admirable flippers in the water, and as forefeet on land. The birds use them as such in order to climb steep slopes. Their feet are placed so far back that the body is quite upright when the bird is standing on the ground. They walk in this position, and, although they cannot go fast on their short legs, travel long distances. On smooth ice or snow they drop flat and "toboggan" along by pushing with wings and feet. Their powers of diving and swimming are amazing. Sir James Ross once saw two penguins swimming at a distance of a thousand miles from the nearest land. For a bird that cannot fly, such a feat of endurance seems beyond belief.

There are at least six varieties of penguins in the far Antarctic and of these the Adélie is the most numerous. Though smaller than the others, it is a fair-sized bird, standing about two and a half feet high. The biggest is the Emperor, a very fine fellow over three feet tall when full grown and weighing as much as ninety pounds. Penguins are protected from the bitter cold by a thick layer of fat and a most wonderful coating of warm feathers. They live mainly at sea, and only come ashore to breed.

The Emperor penguin breeds on the ice, and as the chicks need many months in which to develop properly after they are hatched, lays its one egg in July—that is, midwinter. The egg is not left on the ice; if it were, it would be frozen solid

## THE GREAT WHITE SOUTH

in no time at all. It is held between the feet and the body of the parent bird and covered with a curious flap of skin which is dropped over it. But though most of the eggs seem to hatch, the poor chicks have a cruelly hard time of it; they are exposed to temperatures of fifty or sixty degrees below zero and if they escape the cold are often killed by kindness because the adult birds are too eager to protect them. It is said that only one in four survives until the spring. The habits of the Adélie seem more sensible to us, for the birds come in off the pack ice in spring and gather in huge rookeries on the barest ground they can find near the sea. The nests are made of pebbles which the male bird collects while the female does the building. Since it is hard work carrying stones for long distances in the beak, many birds try to steal from their neighbors' heaps. If a thief is caught there is a great to-do, and all through the breeding season these quarrels go on. The old birds take turns on the nest; one keeps the eggs warm for ten days or two weeks while the other goes off to eat, walking

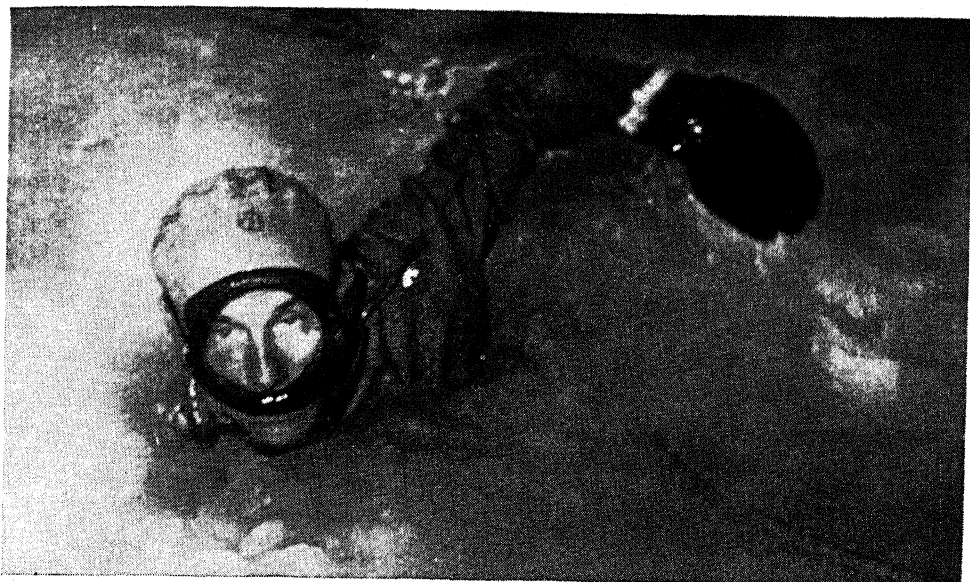
all the way down to the sea to dive for the shellfish on which it feeds. After the eggs have hatched, the parent birds come and go every day or two, bringing food for the chicks. The little ones grow very rapidly, and soon are too big to be fed by one parent at a time. Then the old birds of the neighborhood co-operate; they collect all the chicks from the various nests and mount guard a few at a time to keep them from running off, while the rest of the parents are free to go for food.

What make penguins the most interesting of all birds are their social habits and their strikingly human appearance, which depends partly on the way in which they stand erect and use their dwarfed wings as arms, and partly on the striking black and white plumage of some species. In all their movements ashore they have an absurd likeness to man, and often a group of them looks for all the world like dapper, pompous little gentlemen in evening dress, gravely discussing politics. When they quarrel, the resemblance is even more absurd. A penguin falls out with its neighbor, and a wrangle begins. The two



U. S. NAVY

**LVY3** pushes through the ice in the Bay of Whales, Antarctic expedition base, in February 1947. In the background the U.S.S. Yancey Aka 93 and the Merrick Aka 97 ride at anchor.



**A SWIM IN ICY WATERS**, protected by a special rubber suit. Under it, only a set of long underwear is needed. Around his waist the man has a twenty-five-foot safety line.



PHOTOS, U. S. NAVY

**TOWING GEAR** to be loaded on a plane for an exploratory flight over Antarctica. Should the flyers have to make an emergency landing, the equipment would help them to survive.



FRENCH EMBASSY PRESS & INFORMATION DIVISION

**A TRACTOR WITH WIDE TREADS** designed for gripping the slippery surface without sinking. Innovations such as this are a far cry from the early days of polar exploration.

## THE GREAT WHITE SOUTH

birds scold like old women; other birds thrust themselves into the quarrel, voices rise higher and higher, and at last one attacks the other with beak and flippers. Then the fight rages wildly, and throws the whole colony into an uproar. A delightful penguin habit is speech-making. Especially ceremonious are the Emperors; they are most courteous when they meet another party, or even human beings, whom they seem to mistake for a larger variety of themselves. The group will halt and then one of the older birds steps forward, bows in a portly manner and delivers a long series of gobbling noises like a public speech, until perhaps a rival, who thinks he can do it better, elbows him aside and goes through the whole performance again.

In the water, penguins are marvelously agile and graceful. They swim and play about like a crowd of boys, although seals are constantly lying in wait to make a meal off the smaller birds.

The sea elephant is the biggest of the seal family; it is even larger than the great walrus of the Arctic and actually bigger than the real elephant. Specimens have been killed twenty feet long and twelve feet round the body. The animal

has no trunk, but its heavy nostrils swell out into a snout a foot long, and its huge mouth is armed with long yellow teeth. When enraged the great beast bellows loudly, but though it looks very terrifying it is really a defenseless creature on land. Its flesh is black and oily but its fat yields good oil and the tongue is a delicacy, so it is rapidly being destroyed by hunters.

Another southern seal, the sea lion, is a trifle smaller than its northern namesake of California and Alaska. The male has a fine curly mane, but the female does not and is so much smaller that she is often mistaken for a different sort of seal. The sea lion grows to a length of ten feet, about the same size as the rare sea leopard.

Even the seals must find life difficult during the Antarctic winter, for the whole sea freezes over inshore and they have trouble in keeping open gaps through which they may come up to breathe.

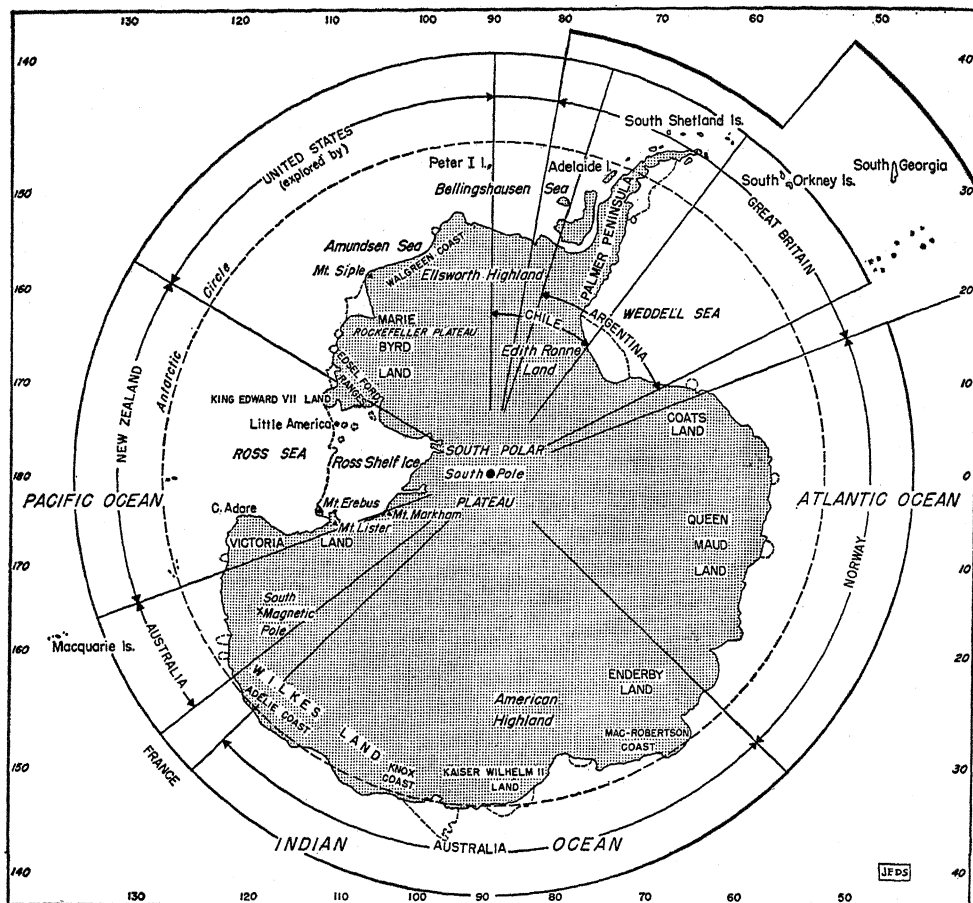
Whales of many kinds are plentiful in the Antarctic and, though halted by World War II, there has been a revival in the whale fishery. Norway and Britain share in the industry and have some hundreds of ships engaged in southern whaling; some of them are floating refineries with capacity for thousands of barrels

**ARRIVAL AT CAPE DISCOVERY**, on the Adélie Coast, of a French expedition for scientific purposes. The Antarctic is a lure today for the scientists of many countries.



WIDE WORLD





**CLAIMS.** Beginning at longitude 20° W. (upper right) and reading clockwise: Norway, 20° W. to 45° E. (including Queen Maud Land); Australia, 45° E. to 136° E. and 142° E. to 160° E.; France, 136° E. to 142° E. (including part of Adélie Coast); New Zealand, 160° E. to 150° W. (Ross Dependency). Explored by the United States but not claimed officially: 150° W. to 90° W. (including Marie Byrd Land). Overlapping claims, in area of Palmer (or Graham) Peninsula and Weddell Sea: Chile, 90° W. to 53° W.; Argentina, 74° W. to 25° W.; Great Britain, 80° W. to 50° W. (south of latitude 58° S.) and 50° W. to 20° W. (south of latitude 50° S.). The U.S.S.R. makes no specific claims but insists on right to territory because of Bellingshausen's work. No claims are recognized by the United States on the part of any other nations.

of oil. As many as sixteen whales have been captured in one day off the Cape of Good Hope, and the great creatures have very nearly disappeared there. However, as long as there are millions of square miles of Antarctic ice they can find refuge in waters too difficult and dangerous for even the best equipped ships. That terrible animal, the killer whale, has no commercial value. This creature is fully twenty feet in length and without doubt the fiercest and hungriest of all things that live in salt water.

Both land and sea in Antarctica are hazardous places for man, and the terrible temperatures, the awful storms and the tremendous masses of ice forbid any possibility of settlement, although Great Britain has established the Ross and Falkland Dependencies as a means of controlling the whaling industry and possible mineral deposits. In the far future the climate may change and become as mild as it was once ages ago, but until that happens the great southern continent of ice and snow must remain desolate.

# THE UNITED NATIONS

## *Hope of Men of Good Will*

While the United Nations were fighting the second World War, men determined that they would build a new international organization, stronger than the League of Nations, to prevent future wars. The starting point was the Atlantic Charter, drawn up by Prime Minister Churchill and President Roosevelt in August 1941. It stated that their countries were fighting for: "a peace which will afford to all nations the means of dwelling in safety within their own boundaries, and which will afford assurance that all the men in all the lands may live out their lives in freedom from fear and want."

ON January 1, 1942, representatives of twenty-six nations signed, in Washington, a declaration expressing support of the principles of the Atlantic Charter. Later, other nations signed this declaration. At the Moscow Conference of October 1943, the governments of the United States, the United Kingdom, the U.S.S.R. and China, in the Moscow Declaration, stated that they recognized "the necessity of establishing . . . a general international organization, based on the principle of the sovereign equality of all peace-loving states and open to membership by all such states, large and small, for the maintenance of international peace and security."

Representatives of China, the U.S.S.R., the United Kingdom and the United States met at Dumbarton Oaks, in Washington, D.C., between August and October 1944, to work out detailed proposals for the new organization. These proposals provided for four principal organs: a General Assembly consisting of all members of the organization; a Security Council of eleven members, of which the Great Powers (China, France, the U.S.S.R., the United Kingdom and the United States) should be permanent; a Secretariat; and an Economic and Social Council under the General Assembly.

At the Yalta meeting, in February 1945, of Prime Minister Churchill, President Roosevelt and Marshal Stalin, it was decided that a conference of the United Nations should be called to meet at San Francisco on April 25, 1945, to prepare the charter of the new world organiza-

tion along the lines proposed at Dumbarton Oaks.

The San Francisco Conference lasted from April 25 to June 26, 1945. On the last day, the charter was signed by representatives of the fifty nations that had participated in the conference. They, together with Poland, which signed the charter on October 15, 1945, are the original members of the United Nations.

In accordance with its terms, the charter came into force on October 24, after it had been ratified by China, France, the U.S.S.R., the United Kingdom, the United States and a majority of other signatory states.

New members to the United Nations are admitted by a two-thirds vote of the General Assembly upon the recommendation of the Security Council.

The four purposes of the United Nations are: (1) to maintain international peace and security; (2) to develop friendly relations among nations based on respect for the equal rights and self-determination of peoples; (3) to co-operate in solving international problems of an economic, social, cultural or humanitarian character, and in promoting respect for human rights and fundamental freedoms for all; and (4) to be a center for harmonizing the actions of nations in attaining these common ends.

The United Nations has six principal organs: the General Assembly, the Security Council, the Economic and Social Council, the Trusteeship Council, the International Court of Justice and the Secretariat.

## THE UNITED NATIONS

The General Assembly is composed of all the members of the United Nations. Each may send five representatives, but has only one vote in the assembly. Important matters are decided in the assembly by a two-thirds vote, other matters by a simple majority. The assembly holds one regular session every year and may hold special sessions.

### *The General Assembly's Duties*

The assembly, the charter states, may discuss any questions "within the scope of the present Charter or relating to the powers and functions of any of the organs" of the United Nations, and may make recommendations on such questions, except on questions being considered at the time by the Security Council. However, in 1950, the assembly decided that if the permanent members of the council could not agree to a decision on a possible threat to the peace, the assembly should itself recommend action and could meet for that purpose in emergency session at the request of any seven members of the council, or of the majority of the members of the United Nations.

The assembly's field of operation is thus very wide; and the fact that it includes all the members of the United Nations has led the assembly to play a direct part in all matters affecting the organization. The divergence of opinion on fundamental political issues between the Great Powers, which has on various occasions prevented the Security Council from acting, has led members increasingly to bring questions before the assembly, where these powers have no special voting privileges and where the views of the "middle" and smaller states may have greater influence.

The Security Council consists of eleven members of the United Nations, five of which (China, France, the U.S.S.R., the United Kingdom and the United States) are permanent members, the other six being elected for two-year terms of office by the assembly. In the council a matter of procedure is decided by an affirmative vote of any seven members of the council. On a matter of substance the majority of seven must include the affirmative vote

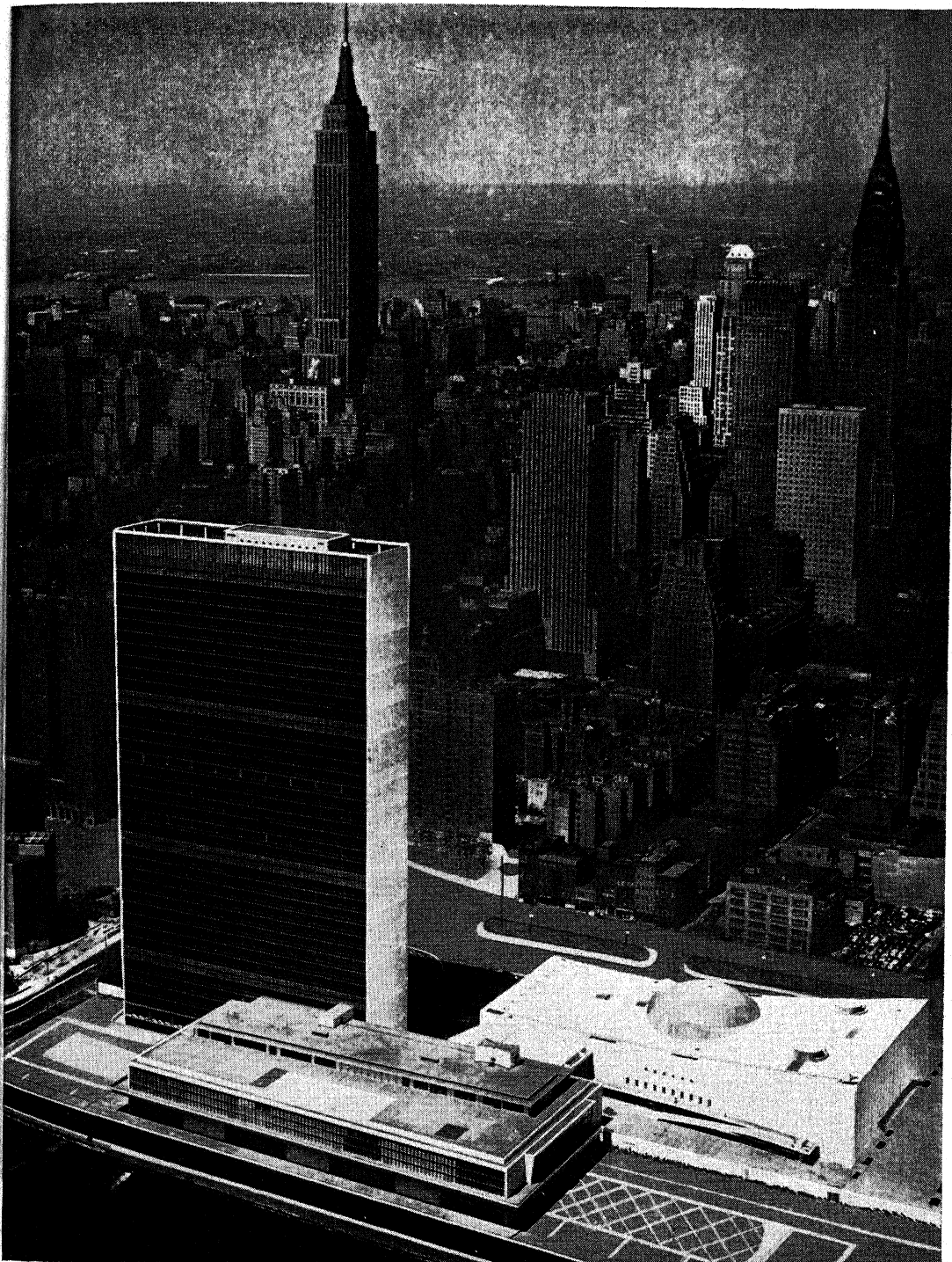
of all the permanent members. A party to a dispute does not, however, vote on recommendations for a peaceful settlement of that dispute. In practice the absence of a permanent member is not considered as a veto.

The charter provides that the council may make recommendations for the peaceful settlement of disputes, and recommend enforcement measures if peace is threatened. Should the council decide that an act of aggression has occurred, or that a threat to the peace exists, it may decide what measures should be taken to restore peace. It may call upon the members of the United Nations to break off economic relations and rail, sea, air, postal, telegraphic, radio and other means of communication, and to sever diplomatic relations. Should these measures not be successful it may take action by air, sea or land forces. A Military Staff Committee consisting of the Chiefs of Staff of the permanent members, or their representatives, was to assist the council in questions connected with such forces. By June 1951, however, no agreement had yet been reached on these forces. Meanwhile, at the council's request, members placed national contingents under a unified command in Korea.

### *The Economic and Social Council*

The Economic and Social Council, which operates under the authority of the General Assembly, consists of eighteen members elected for three-year terms of office by the assembly. This council may make recommendations and initiate studies for dealing with international economic, social, cultural, educational, health and related questions and for promoting human rights. It may prepare draft conventions and call for international conferences on these subjects. The council works in close co-operation with the Specialized Agencies.

Non-self-governing territories are placed under the International Trusteeship System. The trusteeship agreements name the administering authorities for the territories and the terms under which they are to be administered. The General Assem-



UNATIONS

**SYMBOL OF HOPE**, the headquarters of the United Nations in New York. In foreground are, left to right, the Secretariat building, the Conference Area and the General Assembly building.

## THE UNITED NATIONS

bly is responsible for the operation of the system, except in the case of territories named "strategic areas," which come under the supervision of the Security Council.

The Trusteeship Council, which also functions under the authority of the General Assembly, consists of the member states administering trust territories, the permanent members of the Security Council not administering trust territories, and enough other members, elected by the General Assembly for three-year terms of office, to insure that the membership of the council is equally divided between members administering trust territories and non-administering members.

The International Court of Justice is the principal judicial organ of the United Nations. All United Nations members are "parties to the Statute of the Court." and other non-member states may become parties to the statute on conditions laid down in each case by the General Assembly on the recommendation of the Security Council. Other states may bring cases to the court on terms decided in each instance by the Security Council.

The court consists of fifteen judges elected for nine-year terms of office by the General Assembly and the Security Council, voting independently. No two of the judges may be of the same nationality. The court decides cases submitted to it and gives advisory opinions on legal questions to the General Assembly, the Security Council and other organs of the United Nations and Specialized Agencies authorized by the assembly to request such opinions from the court.

The Secretariat consists of the secretary-general and "such staff as the organization may require."

The secretary-general, who is the chief administrative officer of the United Nations, reports annually to the General Assembly on the work of the United Nations, and has the power to bring to the attention of the Security Council any matter that, in his opinion, may threaten peace and security. He appoints the staff, which is internationally recruited, under regulations established by the General Assembly.

The Secretariat is divided into an Executive Office of the Secretary-General and eight departments, a special secretariat for the Military Staff Committee and a Technical Assistance Administration. Each of the departments is headed by an assistant secretary-general. One of these assistants acts for the chief secretary-general if he must be absent for any reason.

Among the Specialized Agencies are: the International Labor Organization (ILO); the Food and Agricultural Organization (FAO); the United Nations Educational, Scientific and Cultural Organization (UNESCO); the International Civil Aviation Organization (ICAO); the World Health Organization (WHO); the International Bank for Reconstruction and Development (Bank); the International Monetary Fund (Fund); the Universal Postal Union (UPU); the International Telecommunication Union (ITU); and the International Refugee Organization (IRO).

By TRYGVE LIE

---

### MEMBERS OF THE UNITED NATIONS:

Original members: Argentina, Australia, Belgium, Bolivia, Brazil, Byelorussian Soviet Socialist Republic, Canada, Chile, China, Colombia, Costa Rica, Cuba, Czechoslovakia, Denmark, Dominican Republic, Ecuador, Egypt, El Salvador, Ethiopia, France, Greece, Guatemala, Haiti, Honduras, India, Iran, Iraq, Lebanon, Liberia, Luxembourg, Mexico, Netherlands, New Zealand, Nicaragua, Norway, Panama, Paraguay, Peru, Philippines, Poland, Saudi Arabia, Syria,

Turkey, Ukrainian Soviet Socialist Republic, Union of South Africa, Union of Soviet Socialist Republics, United Kingdom of Great Britain and Northern Ireland, United States of America, Uruguay, Venezuela, Yugoslavia. Members joining later: (1946) Afghanistan, Iceland, Sweden, Thailand (Siam); (1947) Pakistan, Yemen; (1948) Burma; (1949) Israel; (1950) Indonesia.



# THE RACES OF MANKIND

## *Their Differences and Their Similarities*

The study of human races is as old as mankind itself. By the time men had learned to record their thoughts on stone and clay and papyrus, they had classified the peoples then known to them. However, the early world was small compared to ours, and the peoples with whom the ancients came in contact were relatively few. As the world was explored and additional peoples were discovered, the study of mankind became very complex and a better classification of races was needed. In this chapter we shall read about the basic characteristics that are used by modern specialists in classifying races.

MOST anthropologists separate all of mankind into various subdivisions solely for the purpose of classification. These subdivisions—races, types, breeds and so forth—are based on average facial and bodily features, which are the combined result of both heredity and environment.

There is no such thing as a "pure" race: that is, a race that has preserved all of its original features. Through thousands of years the races have mingled and interbred to such an extent that their lines of heredity have become pretty much confused.

A single trait or feature, such as skin color, is not in itself enough to separate mankind into races. A combination of traits must be considered—the color of hair, eyes or skin, average height and body build, width of skull and so on. To illustrate this, compare the peoples of northern India with those of East Africa. The skin color of the former ranges from brown to dark brown, yet a combination of other traits classifies them as Caucasoids or White-like. The people of certain areas of East Africa have light brown to brown skins, but they are classified as Negroids or Black-like because they possess a number of other traits that place them under the Negroid heading.

Specialists have divided mankind into three major groups called *primary racial stocks*. These are the Caucasoid, Negroid and Mongolian stocks, more popularly known as the White, Black and Yellow races. In turn, these major stocks are each subdivided into *primary subraces*.

The White or Caucasoid racial stock, inhabiting Europe, North Africa, the Middle East and the northern part of India, is characterized by a ruddy white to medium brown skin; curly, wavy or straight hair of the lighter shades; and a relatively prominent and narrow nose. Within this stock are five or six primary subraces—the Mediterranean, Alpine, Northwest European or Celtic, Nordic, East Baltic and perhaps the Ainu of Japan.

People of the Mediterranean group inhabit a fairly narrow zone stretching from Portugal, along the Mediterranean coasts, through Asia Minor and the Middle East, and all the way to northern India. Basically they are long-headed people. Their eye and hair colors range from dark to light brown. The nose is usually straight or aquiline. They are of medium stature and slender body build.

The Alpines are on the whole broad-headed. Their hair and eye colors are medium brown, and the nose is wider and fleshier than that of the Mediterraneans. Alpines are of medium height, like the Mediterraneans, but are thickset, often stocky. This subrace is largely concentrated in a zone starting in northeastern France and extending through the hilly or mountainous parts of central Europe to the Urals.

Members of the Northwest European primary subrace have facial and skull features that fall somewhere in between those of the Mediterraneans and the Alpines. They are of medium head width, with blue or gray eyes and brown hair. The nose

is usually straight in profile and narrow. Members of this group range from medium to tall and are of medium to slender build. The region they inhabit includes the greater part of northwestern Europe.

The Nordic subrace is essentially a blond phase of the Mediterranean. The chief differences between the two are to be seen in coloring and size. Apart from these, the surface features of these two subraces are very much alike: long-headedness, a straight or slightly convex, narrow nose, a relatively narrow face. The coloring of the Nordics is of the lighter shades: blue or gray eyes, ruddy skin, ash-blond to light-brown hair. The Nordics have a slender body build, like the Mediterraneans, but they are taller. The main areas occupied by the Nordic subrace are in the uplands of Norway and parts of Sweden.

The East Baltic subrace of Finland, European Russia, Poland and north Germany is sometimes called the Northeast European subrace. Its members are not unlike the Nordics in coloring. The differences show mostly in the nose shape, which in the East Baltics is wider and shorter, sometimes straight in profile and sometimes slightly concave, and in body build and height. Body build may vary a good deal, but for the major part of this group it ranges from medium to stocky, and height ranges from medium to short.

To the five subraces already described we may add the Ainus. They are a "remnant" subrace, small in numbers, inhabiting the northern part of the main island of Japan (Honshu) and Hokkaido Island to the north. They are thought to have been the original population of the Japanese islands before the coming of Mongoloids. Characteristic features of the Ainus are medium head-width, a medium to wide flat nose, dark brown hair and eyes, short stature, thickset build.

Members of the Negroid racial stock are found in two widely separated regions—Africa, excepting the northern part, and Oceania. They are characterized by long-headedness, a short, wide nose, dark brown to black skin, hair and eyes. This stock may be divided into three primary

subraces—the Forest Negro, sometimes called the African Negro Proper, the Sudanese or Nilotic Negro, and the Negrito.

The Forest Negro generally serves as the model for the Negroid stock. In addition to having the characteristics mentioned for the primary stock, most members of this subrace are of medium build and height, with long, powerful arms and large hands and feet. The Forest Negroes form the bulk of the native population in much of West Africa and the Congo and they are fairly numerous in South Africa and in some parts of East Africa.

The Sudanese or Nilotics differ from the Forest Negroes principally in stature and the shape of the nose, which is less wide among the former. The Sudanese are among the tallest people of the world, and their tallness is emphasized by their extremely long legs. They live in the central part of the eastern Sudan and along the tributaries of the upper Nile River.

The Negritos are very small in size. They are generally less than four feet, nine inches in height, with a lighter skin color than that of the two other Negroid groups. They have a greater head-width, a woolly type of hair and a nose that is sometimes as broad as it is long. They are found as isolated groups in the Congo forest of Africa and in southeastern Asia, where they inhabit the mainland (Malaya) and the islands off the coast (the Philippines, New Guinea and the Andaman Islands).

The third primary racial stock, the Mongoloid, is characterized by yellow skin, straight black hair and dark brown eyes. The skin of the upper eyelids is folded over to give the eyes a slanting appearance. The face is flat and padded with fat; the nose is small, almost infantile. The body build is usually stocky and wide-shouldered, and the arms and legs are short. Two primary subraces of this stock are recognized: the Classic Mongoloid and the Arctic Mongoloid or Eskimoid. The chief difference between them is in head-width, the Classic Mongoloids being broad-headed and the Eskimoids medium or long-headed. Also, the Mon-

## THE RACES OF MANKIND

golian eyefold is more complete and occurs more often in the Classic group. The Classic Mongoloids are found in Siberia, Mongolia, Tibet and northern China; the Eskimoids in Arctic North America and northeastern Asia.

All of mankind, however, does not fit neatly into a classification scheme like the one we have just outlined. Some of the most densely populated regions of the world have not been mentioned as possessing a distinct primary subrace.

To account for the populations of such regions, we must recognize that the spreading or wandering of a group may have brought it into contact with another primary subrace. The intermingling of the two would result in a composite group. If such a group were able to establish itself in a separate territory and remain relatively undisturbed over many generations, its typical feature characteristics might become set. If the two subraces forming such a group were of the same primary stock, we would then call the group a *composite primary subrace*; if they were of different stocks, then we would call the group a *composite race*.

Several composite primary subraces, such as the Armenoids and the Dinarics, exist within the White stock. The former are probably composed of the Mediterranean and Alpine primary subraces; the latter are likely descendants of the combination of Alpines and Nordics, with a later Armenoid admixture. Armenoids are found principally in the eastern Mediterranean countries of Turkey, Lebanon and Syria and extend into Iran and Iraq. They are also common in southeastern Europe. Dinarics inhabit a smaller area consisting chiefly of the Dalmatian region of Yugoslavia and the Tyrolian Alps.

The bulk of the population of India and Ceylon is represented by a composite race that is predominantly White. The principal element of this mixture is Mediterranean with the addition of some Negrito, Armenoid, Nordic or Mongoloid. The name of Dravidian or Indo-Dravidian is usually given to this group.

The Polynesians, who inhabit numerous islands dotting the wide expanse of

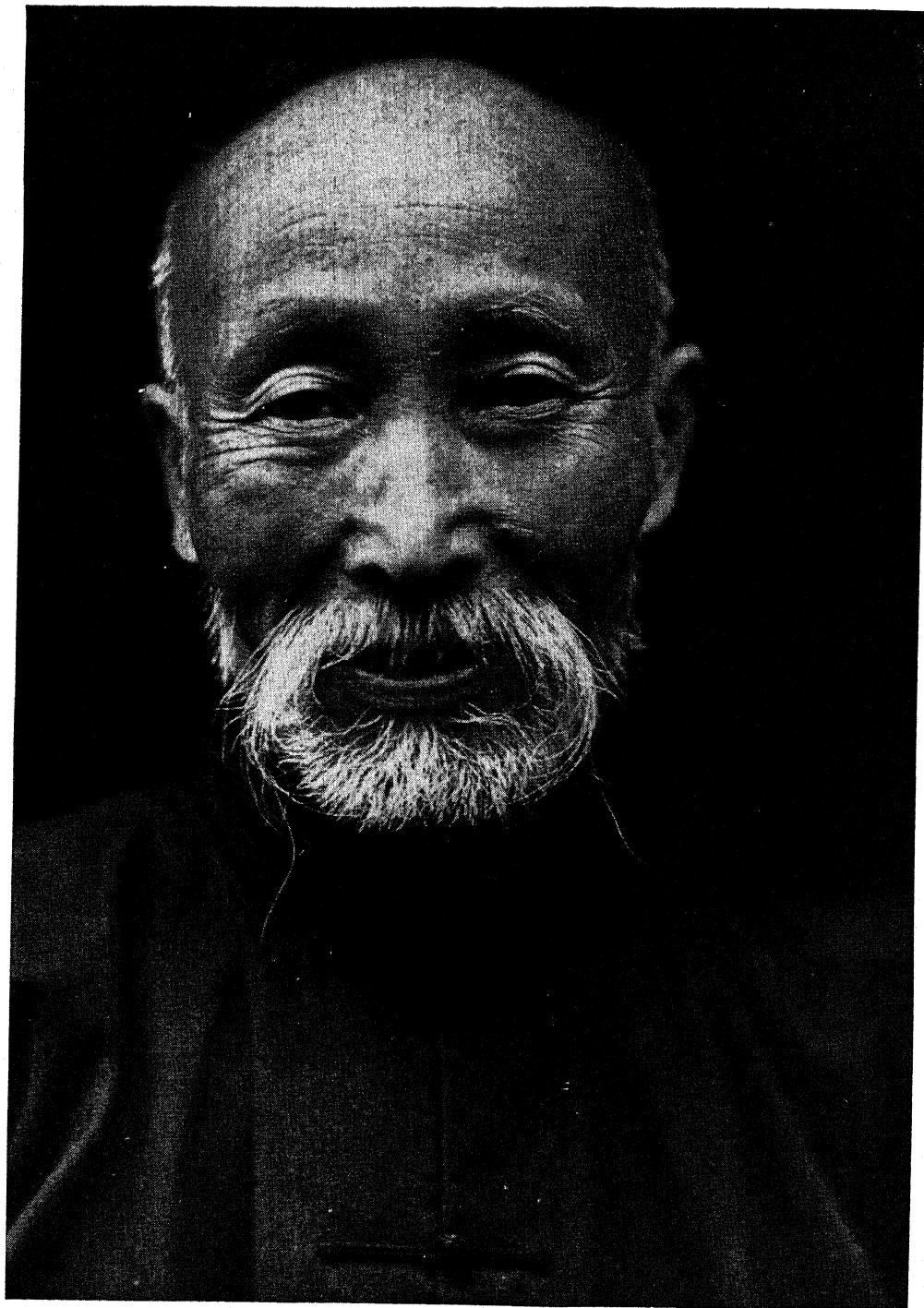
the Pacific, are a predominantly White composite race that includes some Mongoloid and Negroid. The many islands in the southeastern Pacific are inhabited by a composite race that is predominantly Negroid and that includes among its members the Melanesians and Papuans. Australia's aboriginal population is considered a predominantly White composite race with a mixture of Negroid.

Many of the peoples of the Malay peninsula, Burma, Thailand, Indochina, South China and, to a lesser extent, Korea and Japan, represent a predominantly Mongoloid composite race to which has been added Mediterranean, and in the far past, Ainu and Negrito. These are the Indonesian-Mongoloids.

The first inhabitants of the Americas, who arrived some fifteen to twenty thousand years ago, were already a composite race that was predominantly Mongoloid with some Mediterranean and earlier Australoid and Negrito added. However, an Asiatic Mongoloid and an American Indian, particularly a North American Indian, show considerable differences. The Indian has a more prominent, non-Mongoloid nose and a more projecting chin and brow ridges. His skin is generally lighter than that of an Asiatic Mongoloid. His stature varies a great deal, ranging from short, as in the Classic Mongoloid, to very tall. Nevertheless, some typically Mongoloid characteristics persist in the American Indian—the fat-padded face, the straight, coarse hair, traces of the Mongolian eyefold.

The relatively recent development of long-distance mass transportation has altered the racial map of several continents which were formerly only sparsely populated by their aboriginal or native groups. For instance, in North America, members of the Northwest European or Celtic primary subrace are now the most numerous, although the Negroid, Mediterranean, Alpine and East Baltic groups are strongly represented. In Siberia, migrations of predominantly East Baltic people over a century have changed the racial picture of this formerly Mongoloid domain.

BY HENRY MICHAEL



PHILIP GENDREAU, N. Y.

**SLANTING EYES ARE THE DISTINCTIVE MARK OF THE MONGOLOID**

The features of the Classic Mongoloid race appear in the face of this elderly Chinese. His nose is rather flat and his eyes are brown. Upper-eyelid folds give them a slanting look.

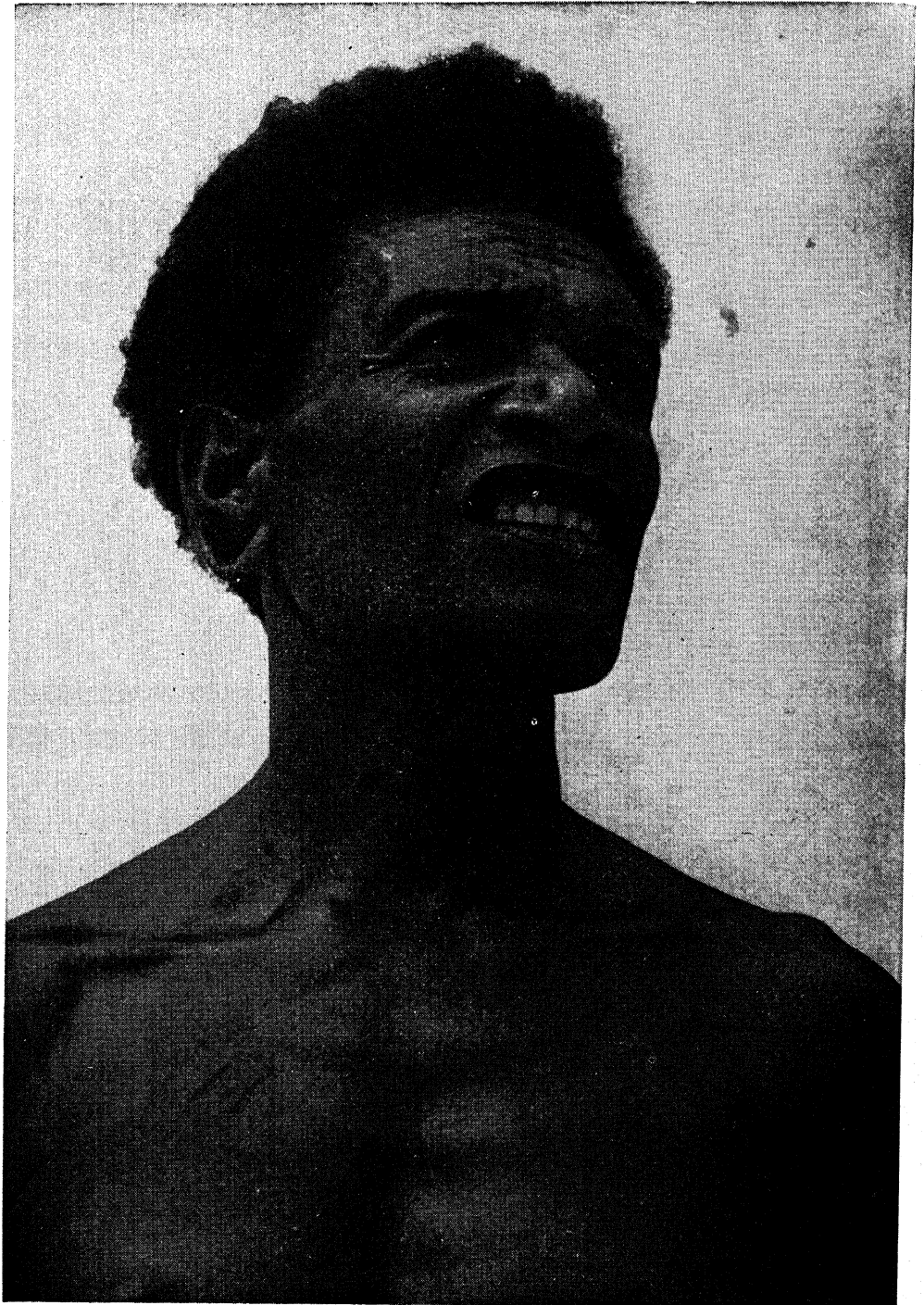


PHILIP GENDREAU

#### BEAUTY OF THE MEDITERRANEAN TYPE AS IT APPEARS IN SPAIN

The proportions of the girl's face and her lovely expression would delight an artist. A traditional lace mantilla sets off her large brown eyes, smooth brow and dark hair.

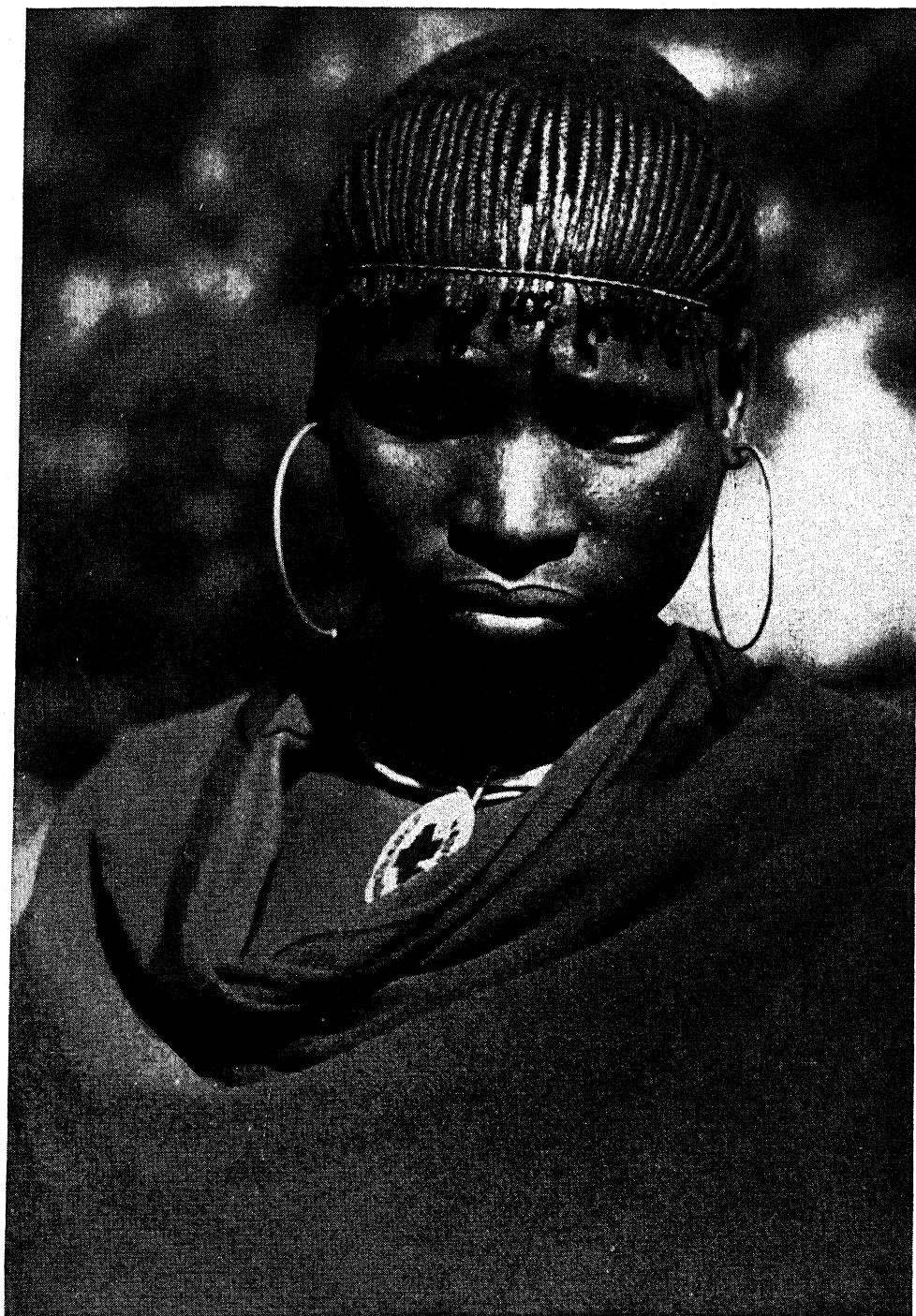




EWING GALLOWAY, N. Y.

A MEMBER OF THE NEGRO RACE IN THE SOUTH PACIFIC ISLANDS

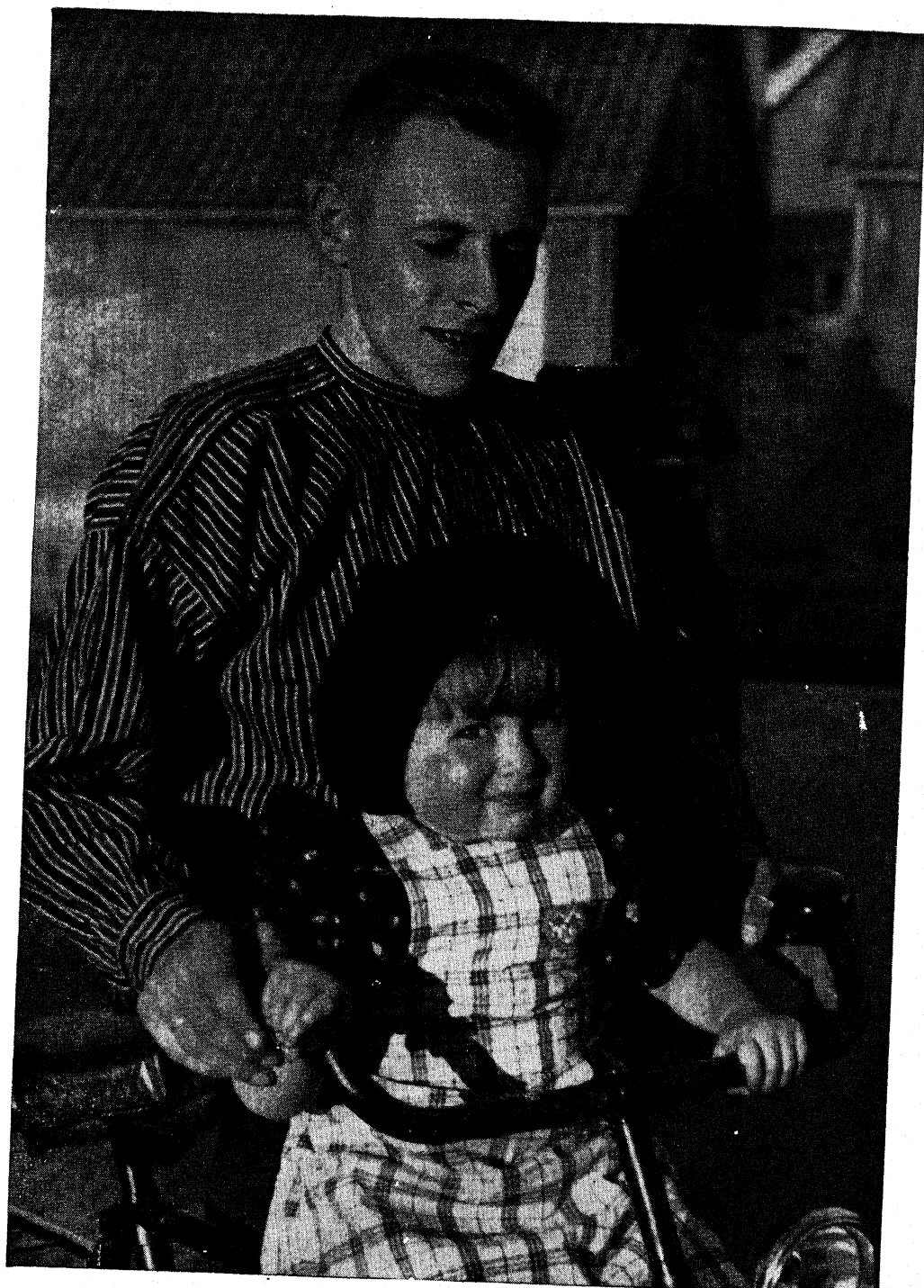
The home of this man is the Solomon Islands, a group in Melanesia. He has woolly hair and a broad nose; but his skin, though dark, is lighter than that of the typical African Negro.



PHILIP GENDREAU, N. Y.

**BLACK EYES AND HAIR IN THIN PLAITS—AN AFRICAN NEGRO**

Forest Negroes form the largest part of the population of Africa from the Congo south. Besides their dark skin, hair and eyes, they are apt to have powerful arms and large hands.



PHILIP GENDREAU

#### A DUTCH YOUNGSTER AND HER FATHER—NORTHWEST EUROPEANS

A chief division of the white race is the Northwest European. As in all other groups, however, individuals show mixtures. The Northwest *type* has brown hair; these two have blond hair.

# RELICS OF ANCIENT MAN

## *Our Inheritance from Long-vanished Races*

Many of the beautiful decorative things of to-day—pictures, statuary, jewelry and splendid buildings—were justly appreciated by peoples who lived many thousands of years ago. There were great artists and craftsmen in very ancient times; and, as the materials in which they commonly worked were enduring, we can still see and admire many of their masterpieces. Some of these are well preserved; others are greatly damaged. They are found all over the world. Sometimes they teach us a great deal about the past; sometimes very little. Many of the very ancient relics were lost to man for thousands of years; they have been restored only through the painstaking work of archaeologists. A number of museums now contain collections of ancient art. These include, in addition, replicas of rare objects which the museum is unable to secure, and often reproductions of buildings, monuments, etc. Many Americans have been interested in making collections of Indian remains. They are not extremely old, but they are plentiful enough to give the details of Indian life before white men came to America.

**M**EN could draw and paint and carve long before they could build. The history of painting is as old as the history of man. During the period known as the Stone Age (over 20,000 years ago) a race lived in southern France and northern Spain who covered the walls of their cave-dwellings with drawings and paintings of familiar animals. A representative collection of these drawings is given on page 250. Excavations in the caves revealed many stone implements and weapons and a number of carved pieces of bone and tusk. These people hunted and fished; they knew the use of fire. But we know nothing about them which can explain the extremely high level which their art attained.

The pictures were first drawn on the walls with a sharp instrument, probably a piece of bone, and afterward color was applied—red, black or gray. At Altamira, in Spain, there are dozens of sketches of bison, wild boars, cattle, deer and horses. These

first artists were successful in making their pictures beautifully alive—one bison is charging; another, chewing the cud, and another, raising his head to low. Different species of animals are painted in the caverns of Font-de-Gaume and Les Combarelles, in France. The most interesting are mammoths, resembling elephants, but with shaggy hides and longer tusks; rhinoceroses, with sharp, curving horns and woolly fleeces, and great cave-bears. All of these species are now extinct. Some of the other pictures in these caverns are quite familiar—wolves, reindeer and ibexes. All of these drawings show

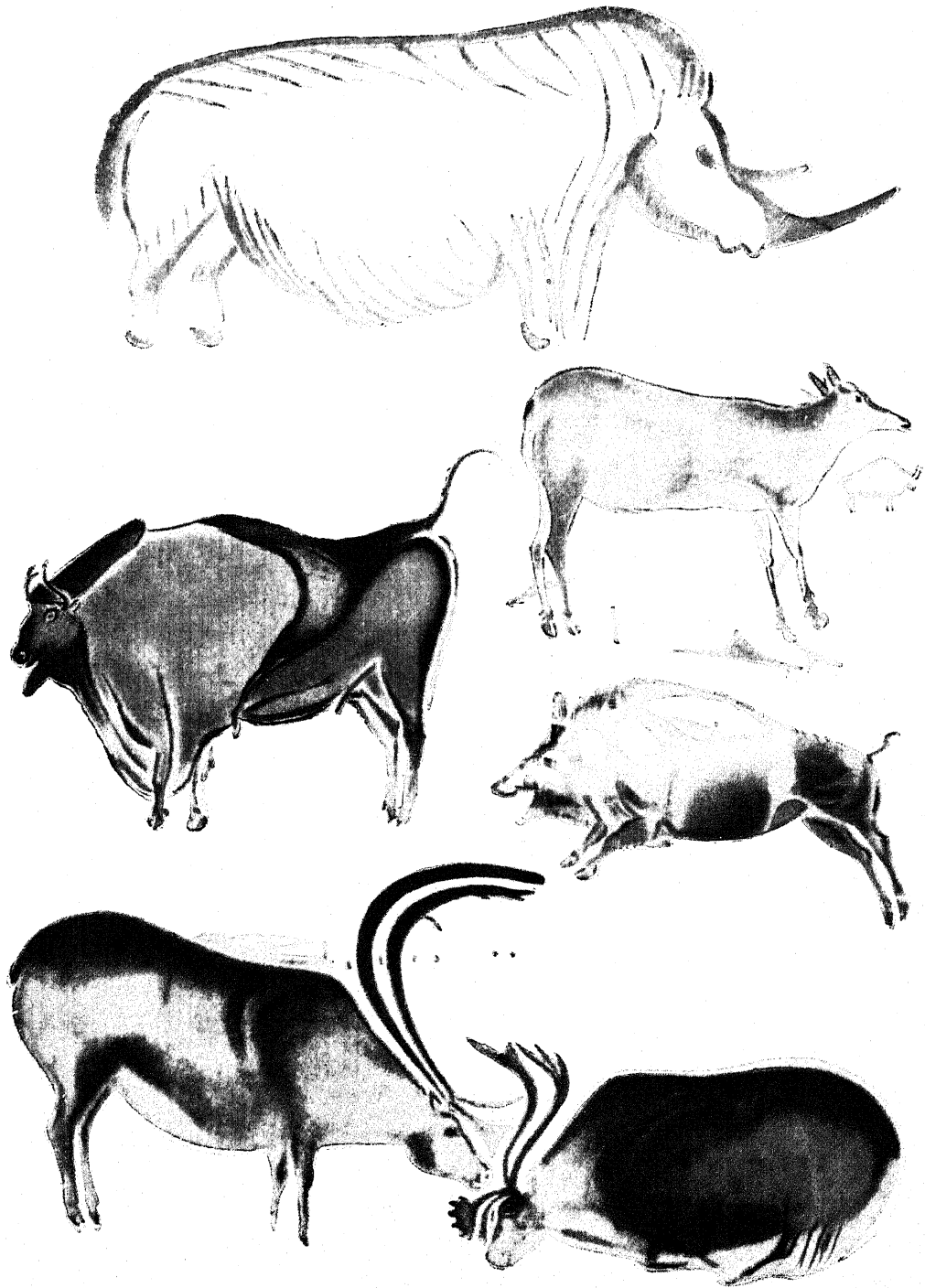
a complete understanding of the animals' peculiar features and are rendered in a direct, unhesitating manner. The carvings on bone show equal skill. Portraits of wizards are also included in some of these wonderful picture-galleries. In a cavern near the River Ariège, in France, we may see a horrible sorcerer dressed in the skins of wild animals. He wears a



*Antiquaries' Journal*

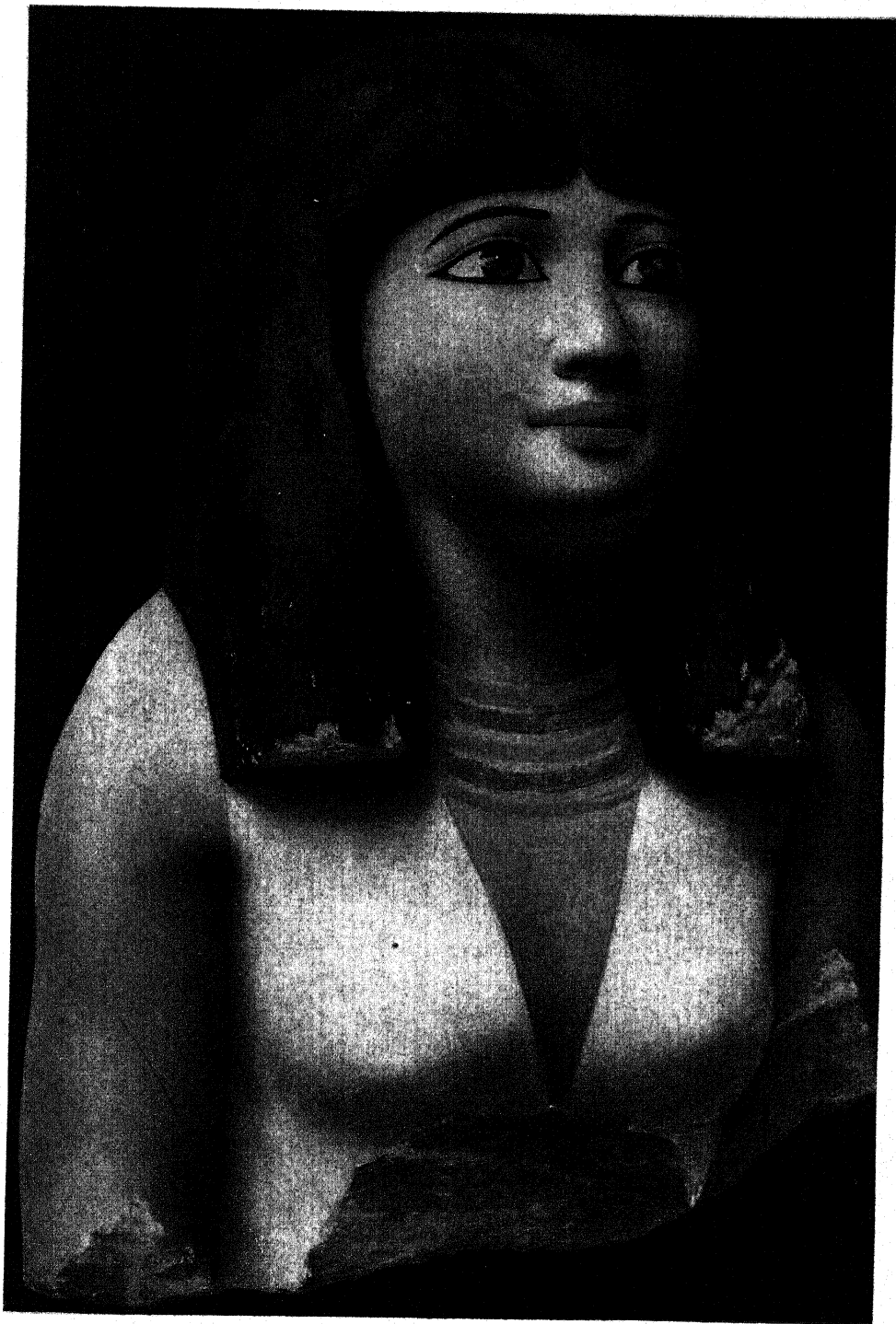
### STONE AGE ROCK CARVING

Many splendid examples of such carving have been found in caves throughout France, usually on tusks or pieces of bone. It was done during the Palæolithic period of the Stone Age.

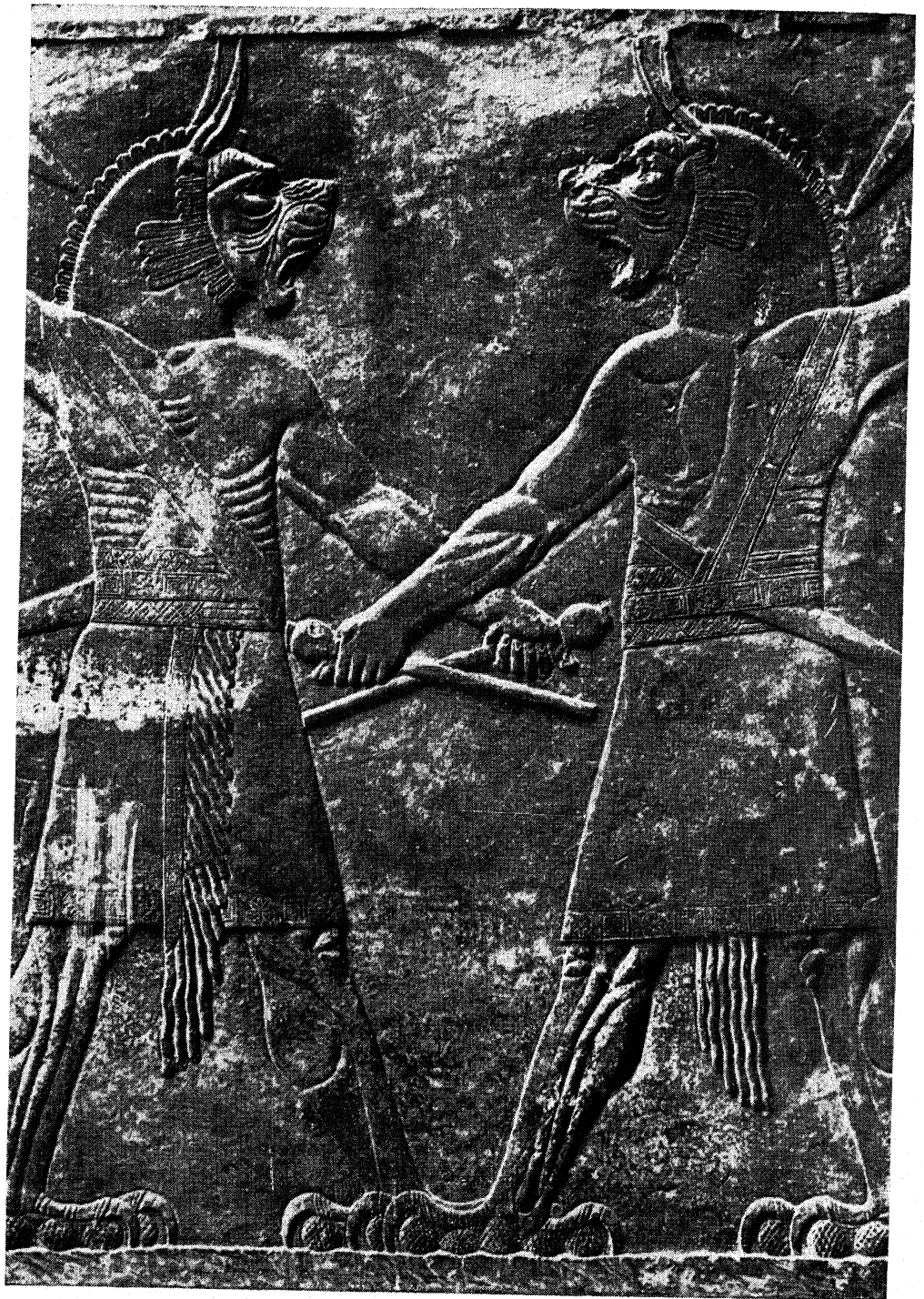


**MASTER ARTISTS** of the Stone Age painted these animals in caverns at Font-de-Gaume, France, and at Altamira, Spain, between twenty and fifty thousand years ago. The accurate observation and forceful rendition make us surmise that they were equally skilled in the art of hunting. The species of woolly rhinoceros is now extinct.





**EGYPTIAN ART** produced many such bits of sculpture as this some four thousand years ago. A great variety of paintings and sculptures has been found by excavations in tombs because of the Egyptian custom of burying with the dead representations of all that was necessary to carry on a complete life: slaves, animals and utensils.



BRITISH MUSEUM

### FIGHTING DEMONS AS PORTRAYED BY AN ASSYRIAN SCULPTOR

The sculpture is from the palace of Ashurbanipal, in Nineveh, carved during the seventh century B.C. It is a bas-relief—figures stand out slightly from the background—a Babylonian technique.

## RELICS OF ANCIENT MAN

mask with goggle-eyes, enormous ears, branching antlers and a long beard. As he danced through the primeval forests he must have been a terrifying sight. Later French artists of the Stone Age carved figures and bracelets of ivory and modeled in clay.

The latest discovery was made in 1940, near Montignac, France, when five school-boys discovered a cave, the rocky walls of which were covered with paintings of wild animals. It is believed that these paintings are about 30,000 years old.

### *History Begins*

We know that a systematic civilization existed in the Nile Valley between six and seven thousand years ago. Owing to the abundance of wealth, the early development of written records, and the preservative climate, Egypt has well repaid archaeological research. The discoveries in that country have been so numerous and valuable that two chapters in Volume V have been devoted to them—Ancient Egypt and Sphinx and Pyramid.

In ancient times the Babylonian and Assyrian empires were among the most enlightened and powerful states of the East. Their great cities stood in the land watered by the Tigris and Euphrates—Mesopotamia, or Iraq, we call it to-day. Control over this region shifted between these two empires during the period from 2500 B.C. to 500 B.C.

### *Early Culture in Mesopotamia*

We owe much to the Babylonians. They invented a system of writing very early—more than four thousand years before Christ. Clay tablets were used instead of paper and a sharp engraving instrument instead of a pen. Education was general among both men and women, and we have to-day many of the texts that were prepared for student use. Their deep interest in astronomy is reflected in the observatories that were attached to the temples and in the development of mathematics, and the invention of the zodiac, the sun-dial, and the crystal lens. The Assyrians were essentially soldiers; their culture was Babylonian in origin.

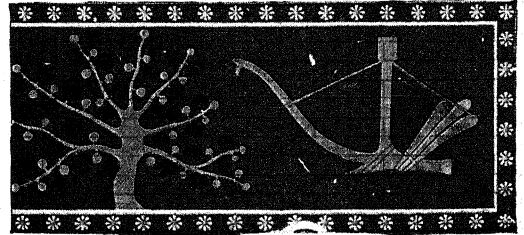
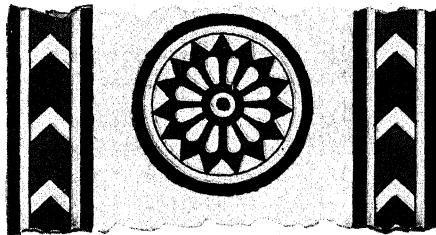
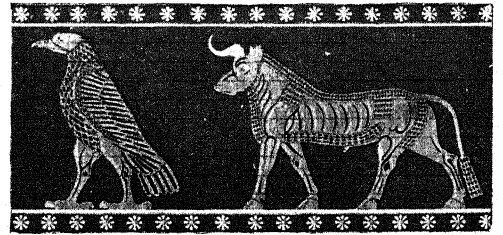
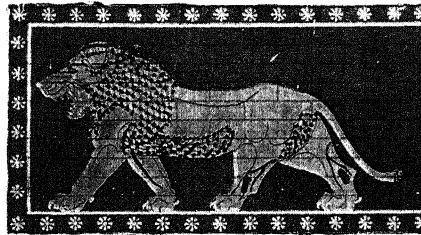
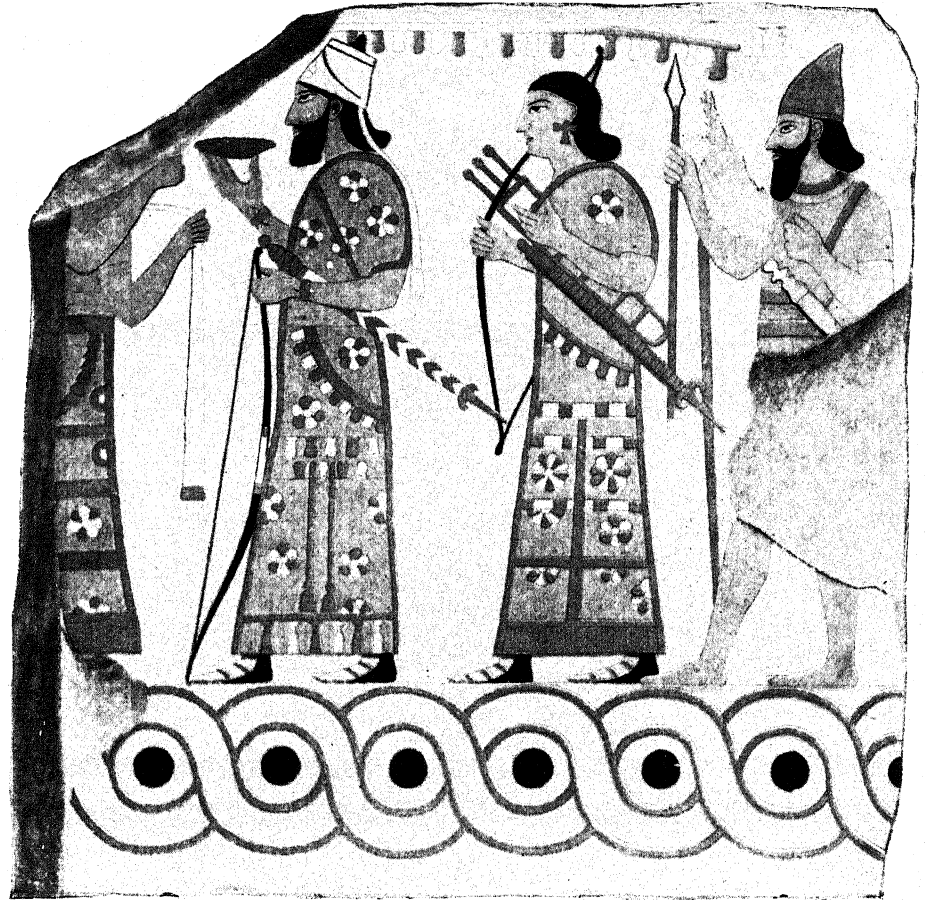
It was in tile-glazing and working in clay that the artists of Mesopotamia, and especially those of Babylonia, chiefly excelled. Babylon was largely built of brick, and decorations had to be suited to this material. Hence tiles were prepared—wonderful enameled tiles of many colors—and methods of painting bricks effectively were evolved. Stone and clay as well as glass were used to fashion lovely vases. Great skill was developed in stone-cutting and jewelry-making. Temple walls were sometimes plated with engraved sheets of bronze or gold in addition to the terra-cotta decoration.

The typical buildings of ancient Mesopotamia were massive and rectangular; the second story was slightly smaller than the first, and the third smaller still, which gave the structures a slight resemblance to pyramids. We may judge of the size and splendor of the old temples and palaces by examining the ruins at Ur of the Chaldees, at Nineveh and at Babylon. Assyria closely followed the example of Babylonia in building, even though another style of architecture would have been more suited to her country. Later, however, the Assyrians began to substitute native stone for brick. This led to the use of carved stone slabs for both walls and floors.

### *Babylon the Great*

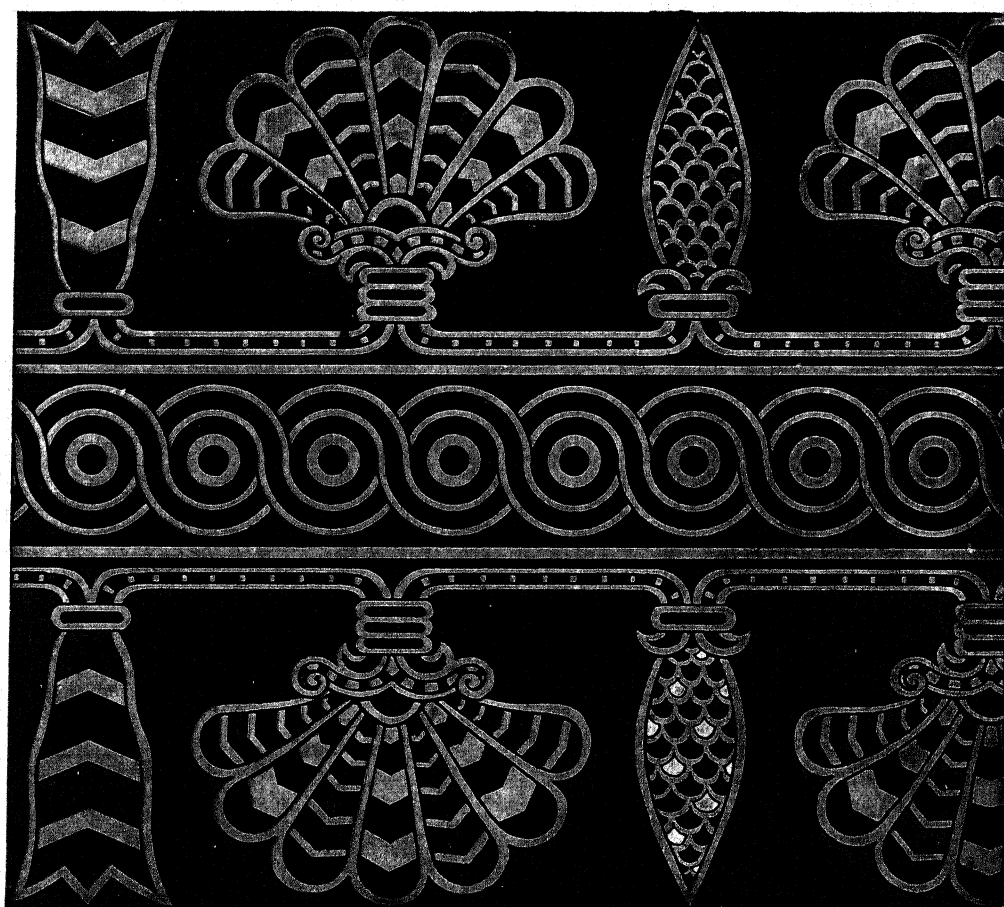
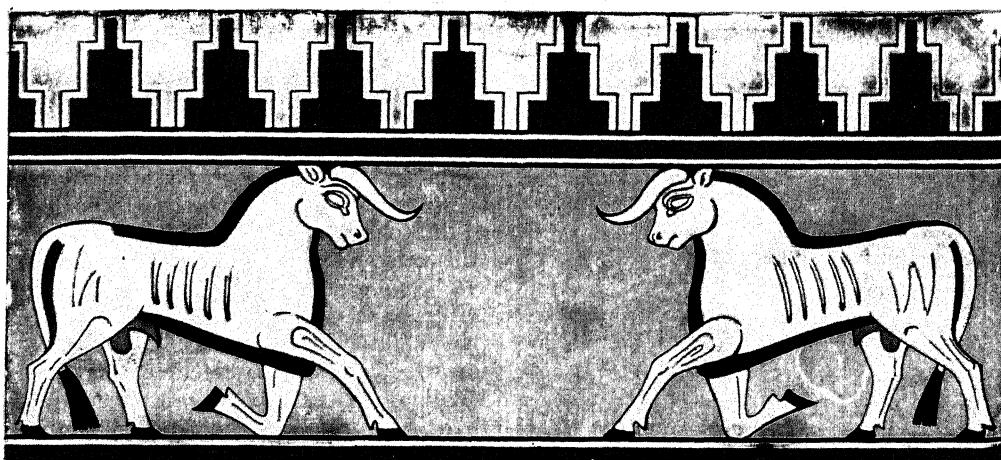
This city, the capital of a powerful kingdom, was perhaps the most beautiful of the ancient world. According to tradition the brick walls which enclosed it were magnificent in size and decoration. Its hundred gates were made entirely of bronze, with carved bronze lintels and posts, and the entire wall lined with hunting scenes, brilliantly executed in enameled tiles. The famous Hanging Gardens were located here as well as many beautiful temples and palaces, including those of Hammurabi, the monarch who codified his country's laws, and King Nebuchadnezzar.

Assur, the first capital of Assyria, was later supplanted by Calah (Nimrud) and Nineveh. It is in Nineveh that we find the fragments of the wonderful palace



LAYARD

DISCOVERIES OF BRICKS and tiles show the skill of the potter's craft in Assyria. The portion of a brick which shows a king and his court returning from a hunt was found at Nimrud in modern Iraq. These are representative tiles, both in their yellow and blue coloring and in the decorative treatment given animals and fruit trees.



LAYARD

**FROM NIMRUD** (the ancient Calah), near Nineveh, came the upper of these two painted bricks. It brightened a palace perhaps 2,700 years ago. It is interesting to compare the treatment of these bulls with that of the animals on page 250. The lower brick shows conventional motifs repeated in a skillful manner to form a frieze.





BRITISH MUSEUM

#### A REMNANT OF SUMERIAN ART

The statue dates back to about the middle of the third century B.C. Its sharply chiseled facial features and fingers are in marked contrast to the plane surfaces of the squat body.

of King Ashurbanipal, whose rule in Assyria began in 668 B.C. Its walls were decorated with descriptive panels, beautifully carved in stone and alabaster or molded in terra-cotta. The kings and attendants of Assyrian sculpture were much alike—men with square, plaited beards, muscular limbs, and the kings wearing elaborate garments and jewelry. In the bas-reliefs of this palace we can see them as they go a-hunting. The panels give a detailed account. In one the horsemen of the king, armed for the chase, are shown galloping past, and we can almost see the horses move and hear the thunder of their hooves so realistic are they.

Lions and lionesses crouch for the spring, or die, transfixed with arrows; herds of wild asses scurry, terrified, before the huntsmen of Ashurbanipal; goats and kids wander peacefully over the plains, as yet undisturbed by sounds of the chase. Then come the bowmen, with nets and hounds, and after them the High King himself, safe in a chariot. Other panels, designed to commemorate the public spirit of the king, give a detailed account of the erection of a great building. They are very interesting in that they furnish us with information regarding the mechanical devices in use at the time. The famous frieze of lions and frieze of archers done in enameled tile which were found at Susa show the strong influence of Assyria in Persian art at this time.

But Susa must have been almost drab compared with Persepolis, the next capital of the Persians. The first palace was built here by Darius about 521 B.C. His son, Xerxes, in the early part of the fifth century B.C., erected the great Hypostyle Hall and the Hall of a Hundred Columns. These were audience chambers, and their size and magnificence testified to the wealth and power of the Persian kings. The Hall of a Hundred Columns was so called because its magnificent roof was supported by a hundred carved and fluted pillars. The walls also were carved, showing files of soldiers and, seated on his throne, the King of kings. On each side of the doorway stood huge statues of bulls, with human heads and wings. The Hypostyle Hall was even more elaborate. It stood upon a great platform of stone and its slender, richly ornamented pillars were sixty-five feet high. The walls, too, were covered with marvelous sculptures.

About these two halls were gardens, in which flowers clustered thickly about pools and playing fountains. Near by were palaces and pavilions, all of them beautiful, all superbly decorated. Could we visit Persepolis, not as it stands today, in ruins, but as it was in the days of Xerxes, we would probably think ourselves in one of the imaginary cities of the Arabian Nights. But its grandeur

## RELICS OF ANCIENT MAN

has all disappeared; only one pillar of the Hall of a Hundred Columns remains standing.

Before the Persians became powerful, however, yet another great empire flourished and decayed, leaving few traces of its glory behind. This was the empire of the Hittites, a mysterious people who are mentioned in the Old Testament. We know very little about them, except that they appear to have been important in Asia Minor before the twelfth century B.C., that they were powerful enough to challenge the Egyptians and that among them were sculptors of genius.

Their great city, Carchemish, which stands on the Upper Euphrates, abounds in magnificent carvings. There are walls covered with soldiers, animals, monsters and gods. We may see representations of fighting bulls, priests sacrificing a lion, and charioteers plowing through the ranks of their foes. The best of these date from some time after 1200 B.C.,

when the Hittite empire was on the wane. But among the ruins of their old capital, Boghaz-keui, we may see examples of early Hittite art, which are just as spirited and as fine as anything at Carchemish.

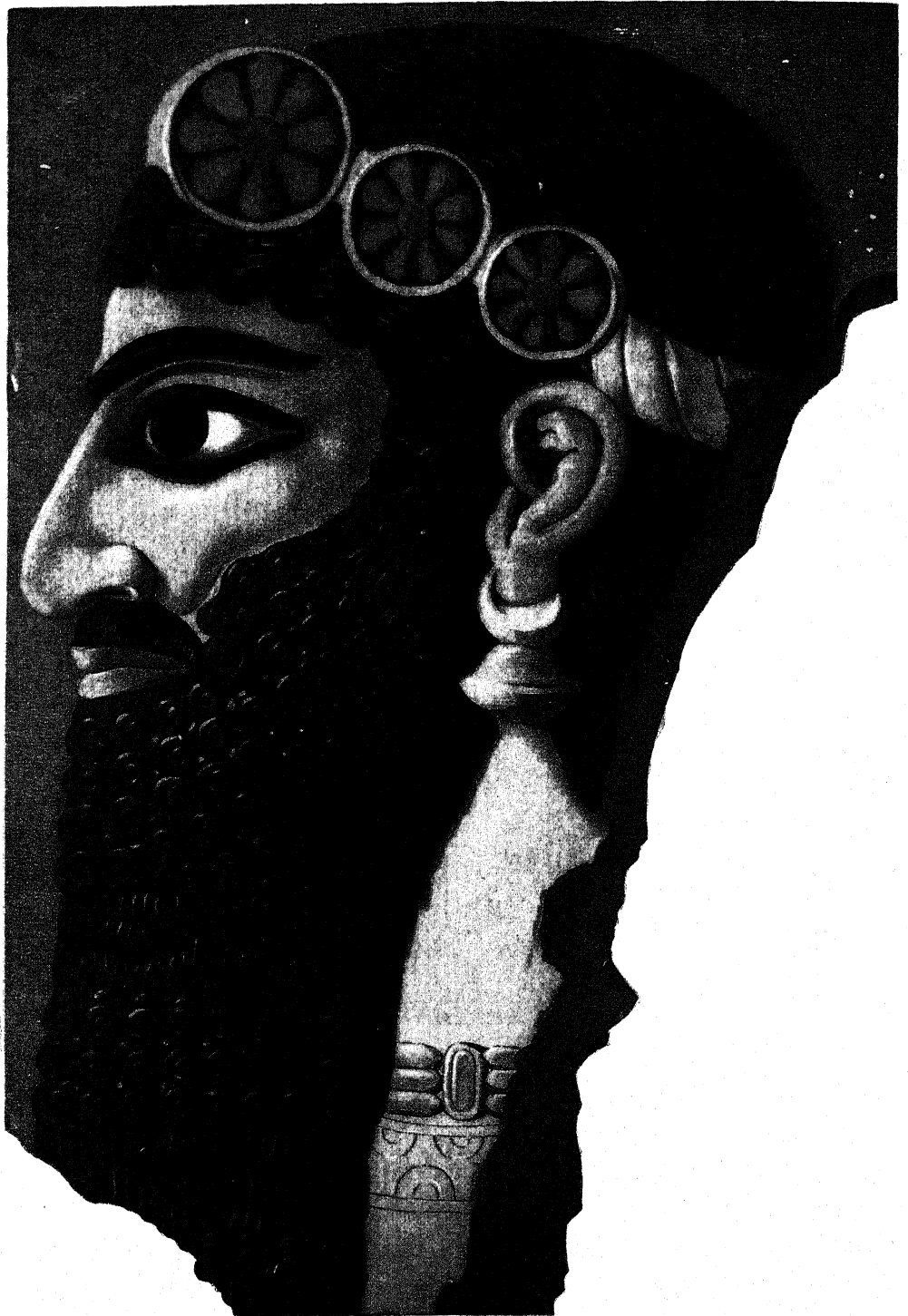
One of the most charming of the tales of ancient Greece describes how a noble Athenian youth, Theseus, went to Crete, to the island of cruel King Minos. There, with the assistance of the lovely princess Ariadne, he slew the fierce monster called the Minotaur, which was half-man and half-bull, and to whom youths and maidens were offered as sacrifices. Excavations in Crete have revealed several interesting palaces which substantiate the details of this legend. The most important palace, at Knossus (Cnossus), covers over six acres. It was undoubtedly built to serve also as a sanctuary. Its winding corridors and passages vividly suggest the labyrinth of tradition, and its numerous wall-paintings illustrate the importance which the Bull (representing the Sun)



Layard

### AN EARLY ASSYRIAN ACCOUNT OF THE CREATION

These carvings from the walls of an Assyrian temple illustrate one of the first accounts of the Creation. According to Assyrian legends, the gods chose Ashur to defend them against the winged dragon Tiamat or Chaos. After cleaving the monster, the hero god created heaven and earth out of the halves of her body.

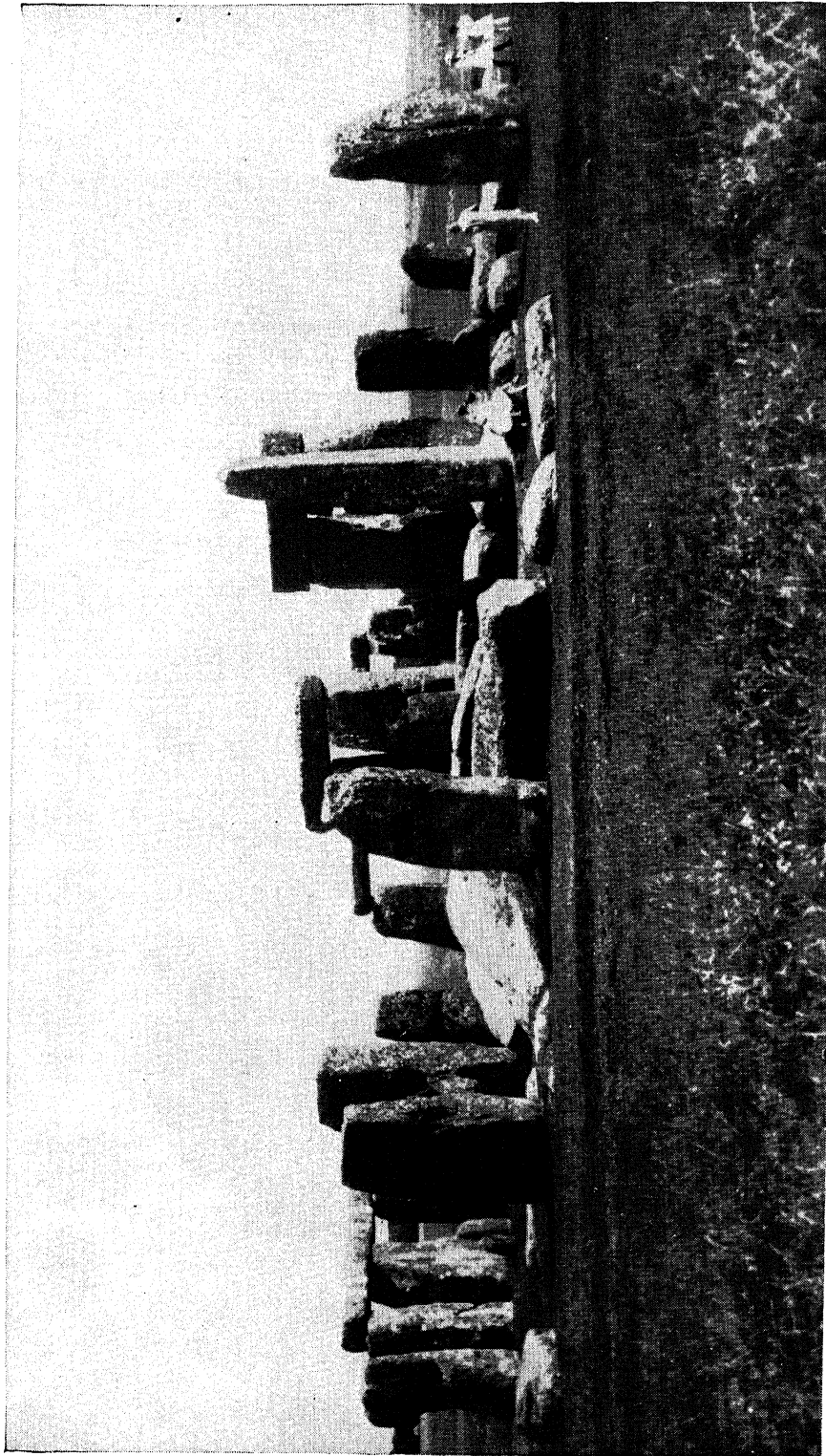


LAYARD

**MEN AND GODS** were shown with wonderfully full beards and thick hair by the Assyrian artists, so that it is impossible to tell whether this fragment from the ruins of Nineveh represents a priest or a god. This particular type of face is found very often in Assyrian monuments and is distinctly Semitic, such as is seen to-day among Beduins and Jews.



ARCHERS OF KING DARIUS have been immortalized in these enameled tiles, now in the Louvre. These were found on the site of Susa, a city which flourished in Persia throughout the period of the Achaemenian kings. The art of making enameled tiles still survives in modern Iran, even though Susa and the Persian Empire are but a memory.



BRITISH INFORMATION SERVICES

**STONEHENGE, WHICH LIES ALOOF AND MYSTERIOUS IN THE MIDST OF WIDE SALISBURY PLAIN, ENGLAND**

When Stonehenge was erected, by an unknown people about 1850 B.C., the other. It is likely that it was a place of sacrifice. The Saxons named the stones stood upright in two circles and two horseshoes, one within the eerie monument Stanhengist, which means the "hanging stones."



## RELICS OF ANCIENT MAN

had in Cretan religion. The amazing feature of this palace is that it is very much in accord with modern ideas although it was built over three thousand years ago. The staircases connecting the several floors, the plumbing system, the stone furniture and the huge ornamented jars show great skill in both design and execution.

### *Late Stone Age in Europe*

While these great civilizations flourished and decayed in Egypt, Mesopotamia, Asia Minor and Crete, a very different state of culture existed in Western Europe. The people who lived there between 4000 and 1600 B.C. left many remains which indicate something of the nature of their religious life as well as the manner in which they procured and prepared their food. They had considerable culture, for their weapons of stone are nicely shaped and polished and are beautifully symmetrical. The edges of the axes, arrows and spears are surprisingly sharp. They left many monuments—varying from groups of three upright stones to great circles and avenues of boulders of varying sizes. The isolated groups, or dolmens, were probably used as tombs, the larger groups for religious observances or to form boundary lines.

On the Wiltshire Downs, about seven miles to the north of Salisbury, is the arresting temple of Stonehenge (page 260). It is impressive because of its isolated position and the great size of some of the stones. When one of these slabs, a lintel supported by two other giant stones, fell at the beginning of this century, it required a powerful crane to restore it to its original position. Imagine how primitive Stone Age engineers must have struggled to first raise it, nearly four thousand years ago! No one knows exactly why Stonehenge was built, although modern study indicates that it may have had some religious meaning. Before this there had existed many legends as to its origin. The most popular was that it was erected by an ancient king to commemorate some military event or that it was constructed for a Druid temple.

### *Forests of Stones*

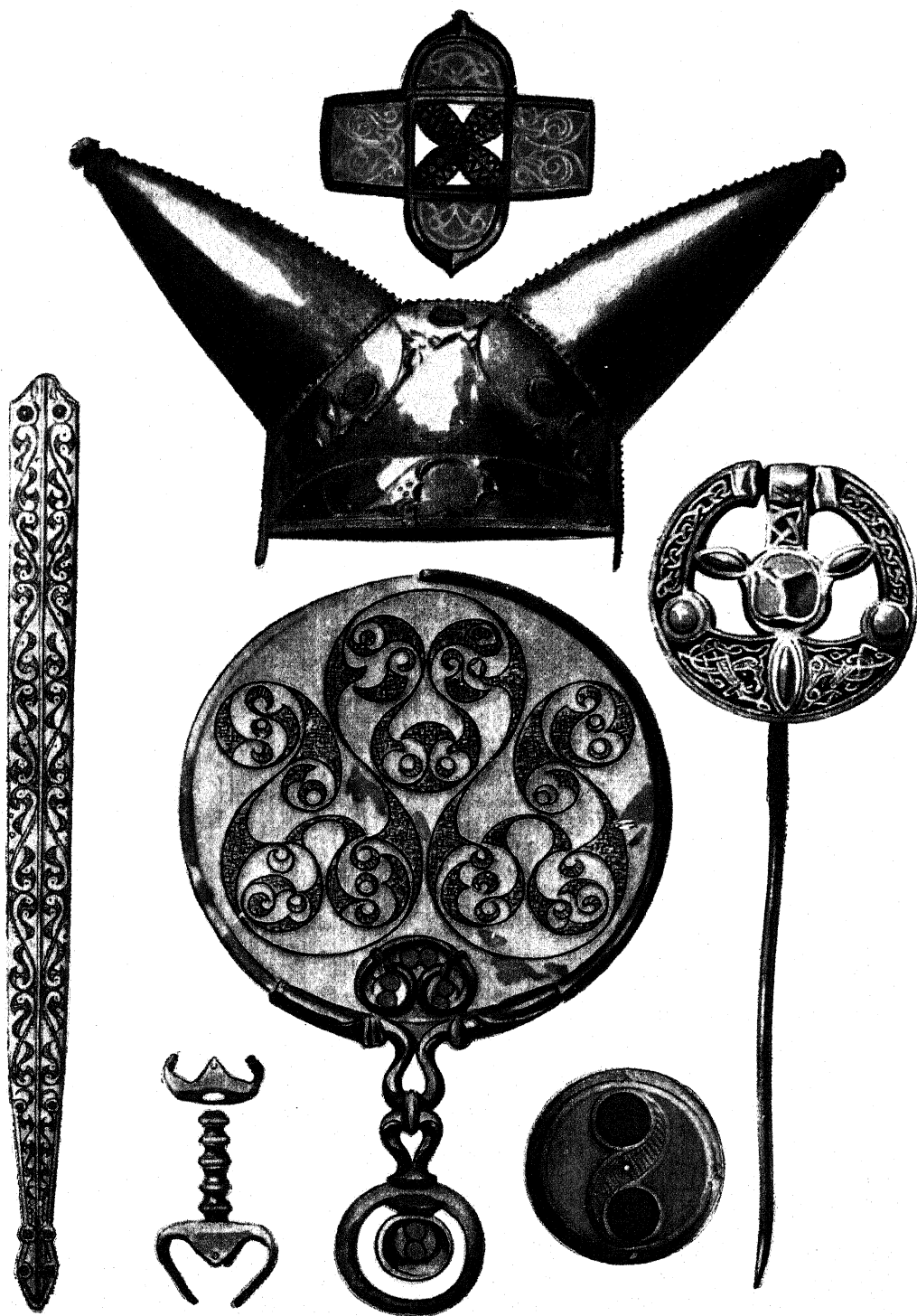
The remains of circles and avenues of great stones are found elsewhere in England, in Berkshire, in Yorkshire, and at Avebury in Wiltshire, for example. They also exist in certain parts of Scotland where it is known that some of them were raised to commemorate military events. In some districts the country folk believe them to be enchanted and haunted by fairies. In Lewes, one of the Hebridean Islands, milk was regularly left in the hollows in the stones as an offering to the "little folk," and this pagan practice only died out in the twentieth century.

It is in Brittany, however, that we see the most amazing works of these ancient builders. Carnac is the centre of a district containing the greatest number of megalithic remains in the world. There are five groups of avenues of upright stones; the largest, at Menec, is like a great forest. Here the stones are arranged in eleven rows, grading in size from thirteen feet to two feet. The next group, Kermario, contains ten lines of stones, and Kerlescan (see page 263) thirteen. The numerous dolmens found in this region were at one time used for burial purposes. Some of the stones found near here are larger than any at Stonehenge. One, called the Fairy Stone near Locmariaquer, now fallen and broken, once measured sixty-four feet. The same type of monument is found in the regions flanking the Pyrenees.

### *The Celts Make Use of Bronze*

The Celts who lived in Britain about 1800 B.C. were skillful in the manufacture of pottery and simple implements and ornaments of bronze. The work in bronze developed until it produced many exquisite examples such as those pictured on page 262. This pre-eminence in the shaping, embossing and enameling of beautiful weapons was one of the greatest achievements of the Celts.

Monuments of the men of ancient times, as we have said, are found not only in Europe and Asia. In Rhodesia are the mysterious ruins—Zimbabwe—



BRITISH MUSEUM

THE CELTS of Ancient Britain developed the art of working bronze to a highly useful state. The making of bronze swords, daggers, spears and axes was soon followed by ornaments such as the ones pictured. Some of these are exquisitely engraved and enameled and a few are inlaid with semi-precious stones. The use of gold and silver was slight.



© E. N. A.

**PRIMITIVE STONE MONUMENTS** are found throughout France and Great Britain. The ones shown (Kerlescan) belong to one of five groups which have been found near Carnac in Brittany. The stones (menhirs) are arranged by size in thirteen rows. These monuments may have been erected to commemorate events or to form boundary lines.



© E. N. A.

**THE DOLMEN DE KERGAVAT** is another ancient monument in Brittany, one of several pre-historic burial places found near Plouharnel. These dolmens, when complete, consisted of three or more upright stones roofed with a huge slab. They might be circular, oval or quadrangular in shape. Many of the dolmens were at one time covered with earth.

## RELICS OF ANCIENT MAN

which were once thought to be the ruins of Ophir, the source of King Solomon's gold. The high towers and thick walls are still standing in southern Africa.

Both North and South America are rich in Indian relics. Implements of flint and bone have a wide distribution; pottery, basketry, metal-work and weaving are confined to certain areas. When the Spaniards came to the Americas they found two great civilizations: the Aztec in Mexico and the Inca in Peru. The older empire of the Mayas in Yucatan had already begun to decline. Ruins of the Mayan cities show us that their culture was more important in its effects than either the Peruvian or Aztec. Their architectural knowledge was especially sound. The favored plan was to erect a group of buildings (temples and palaces) on a large terraced mound. The successive stories of these buildings were set back, in order to give each a foundation of solid stone. The walls were made of thick stone slabs, fitted together, and pro-

fusely decorated with paintings and carvings of symbolic figures. Their interest in astronomy led them to discover the lunar year of twelve months of thirty days about 100 B.C. The spread of this Maya culture formed the basis of many successive cultures in Central and South America.

The Aztecs were great colonizers and empire builders, and they were wise enough to keep the artistic traditions of the tribes which they conquered. The strange and beautiful objects which Cortes sent back to Charles IV were part of the Aztec heritage.

Before the Incas in Peru came into power, the tribes along the west coast of South America had become very skillful in working copper, gold and bronze, pottery-making and weaving. The artistry of workmanship, variety and originality of the textiles is unexcelled. Under the skilled administration of the Incas these abilities came into full flower and fused to form the great Inca culture.



AMERICAN MUSEUM OF NATURAL HISTORY

### STRANGE HEADS BROOD ON THE LANDSCAPE OF EASTER ISLAND

For many years the origin of the heavy, grim figures found on the lonely island was a mystery. Now it is known that they were carved by a Polynesian people who had migrated east.

# CRAFT, ANCIENT AND MODERN

## *How Men Navigate River, Lake and Sea*

One chapter of the story of man's contest with the elements lies written in the devices by which he has contrived to travel upon the water. Where there have been large trees growing close to a river, primitive man has felled them and made of them dug-out canoes. In Bolivia he has made use of the tall reeds that grow in such abundance, binding them together to make not only boats but crude sails as well. The plainsman of the early days in America crossed the Missouri in a coracle of buffalo hide. The Indian of North-eastern America employed birch bark for his canoe. In the rough waters of Alaska the Eskimo has had to contrive a waterproof kayak. Civilized man has marked off the successive stages of his efforts to overcome space and time by his evolution from the Norse long-boat to the Spanish galleon, the Yankee clipper ship, the wooden and then the iron steamboat and now the racing yacht, the dreadnought, the ice breaker and the oil motor.

SOME few years ago there sailed into Ramsgate Harbor the quaintest little ship imaginable, the Tilikum. She was thirty feet long, but narrow, and drew twenty inches of water, yet had three masts. To look at her, one would have thought her fit only for river or lake; yet in her a crew of two men had sailed forty thousand miles, traveling nearly around the globe.

Leaving Vancouver in May, 1921, these two men had crossed the Pacific to Australia, visited New Zealand and thence made their way to Cape Town, South Africa. From Cape Town they crossed the Atlantic to Pernambuco, South America, then, voyaging in an easterly direction by way of the Azores, reached the shores of England. It was a wonderful feat of seamanship because this little two-and-a-half-ton boat was actually nothing but a dug-out—a canoe hollowed from a single huge cedar log by the native Indians of Alaska.

A dug-out is one of the most primitive kind of boats, the kind that man made thousands of years before saws were invented for cutting planks or nails for fastening them together. It will be remembered that Robinson Crusoe, when alone on his desert island, made a dug-out, only to find when he had finished it after weeks of toil that it was too heavy to move. Dug-outs can be made by anyone who can fell a tree and who has tools with which to cut wood or fire to burn it. In the Solomons, a group of large islands lying in

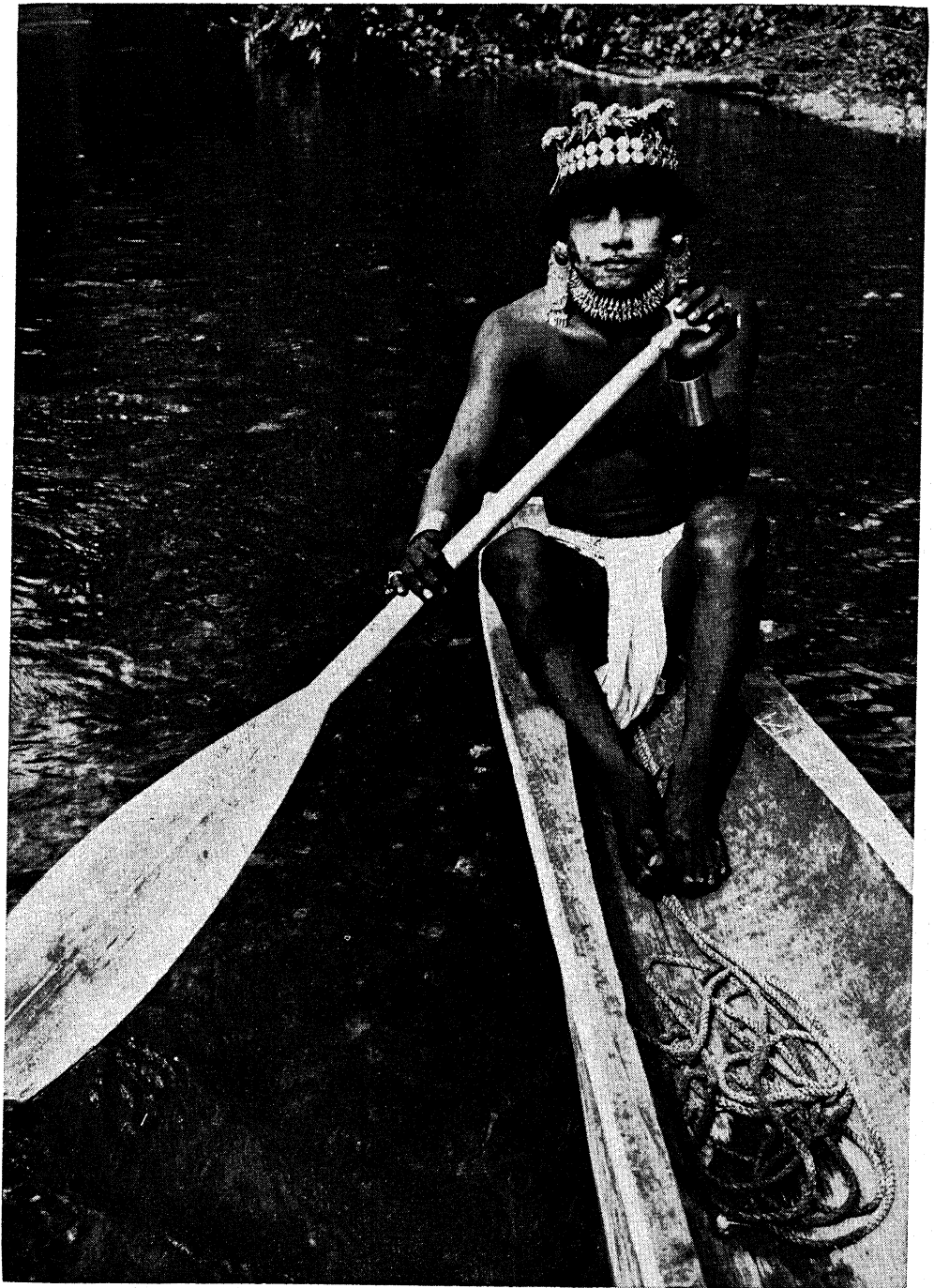
the South Pacific, and on the Niger River in West Africa where trees of enormous size overhang the water, as well as along the North Pacific Coast of America, huge dug-outs are launched.

Dug-outs made from a single log are so narrow that they are inclined to capsize, an accident distinctly awkward, not to say dangerous in waters infested with man-eating sharks. It was for the purpose of preventing such disasters that the outrigger was devised. In its simplest form the outrigger was just a long, straight pole or spar of light wood fastened parallel with the canoe. This original outrigger in its roughest form still exists in the Admiralty Islands.

In the Fiji Islands, however, a group of some two hundred islands, the natives rig their dug-out canoes with large triangular sails and fit them with an outrigger on both sides, as illustrated on another page. The people of Samoa, one of the most beautiful of all the South Sea Islands, are still more ingenious, for instead of an outrigger they fasten a second canoe alongside the first, then build a deck over the two and fit it with mast and sail. It was the Samoan double canoe which suggested the wrongly named catamaran, for which there was, at one time, quite a craze among American yachtsmen. This double-hulled boat carried a tremendous press of sail, and on the calm waters of New York Harbor attained amazing speed.

Catamaran is really a Tamil word and





BLACK STAR

#### CLOROMIRO PADDLES HIS OWN PIRAGUA

An Indian of Darien (Panama) sits in the stern of his canoe, which is made from a tree trunk. Cloromiro is not fixed up for a fancy-dress ball; he wears this kind of decoration most of the time. His headband is composed of dimes from the United States, Panama and Colombia; his necklace, of the teeth of small animals. His body is dyed with native fruit juice.

## CRAFT, ANCIENT AND MODERN

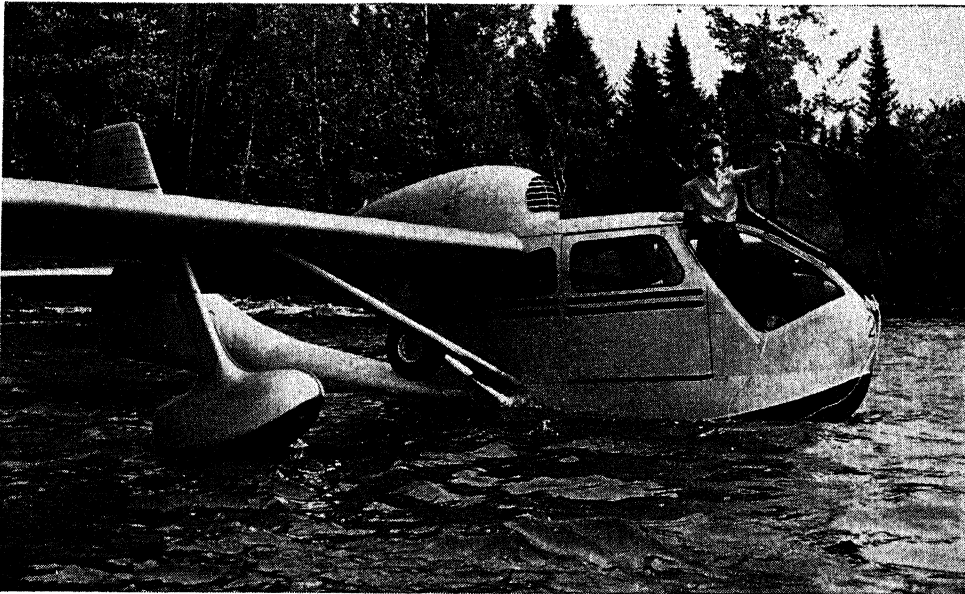
refers to a rude raft made by the natives of Southern India. It consists merely of three logs of light wood lashed together, the middle piece, longer than the others, being used as a keel. Larger catamarans fitted with mast and sail are employed upon the great Amazon River of South America. Some modern craft—sailboats simply for pleasure—have gone back to the design of the catamaran.

The boat, like the plow, had not one, but many inventors. In the old days whenever a tribe happened to settle near a river, lake or sea, there it devised some sort of boat. At first a log or piece of driftwood would be used to help a man float or swim across a river, then two or three logs would be bound together with creepers to form a raft. Where wood was scarce the first stage would be a wicker frame covered with skins, or, as on the Nile in Egypt, a bundle of reeds tied together. It is thought that perhaps these reed floats were the first things to suggest the well known shape of a boat,

which was afterward copied in wood when the next stage, the dugout, came to be invented.

The coracle, which is still in use on some Welsh and Irish rivers, is one of the oldest forms of boat. The original coracle was simply a large basket of wickerwork covered with the roughly tanned hides of animals, but the modern one is a framework of ash or willow covered with canvas made waterproof with tar or varnish. It is so light that one man can carry it with ease, and although a person who is not accustomed to paddling one finds it difficult to manage, a skilled hand will actually go salmon-fishing in one of these craft.

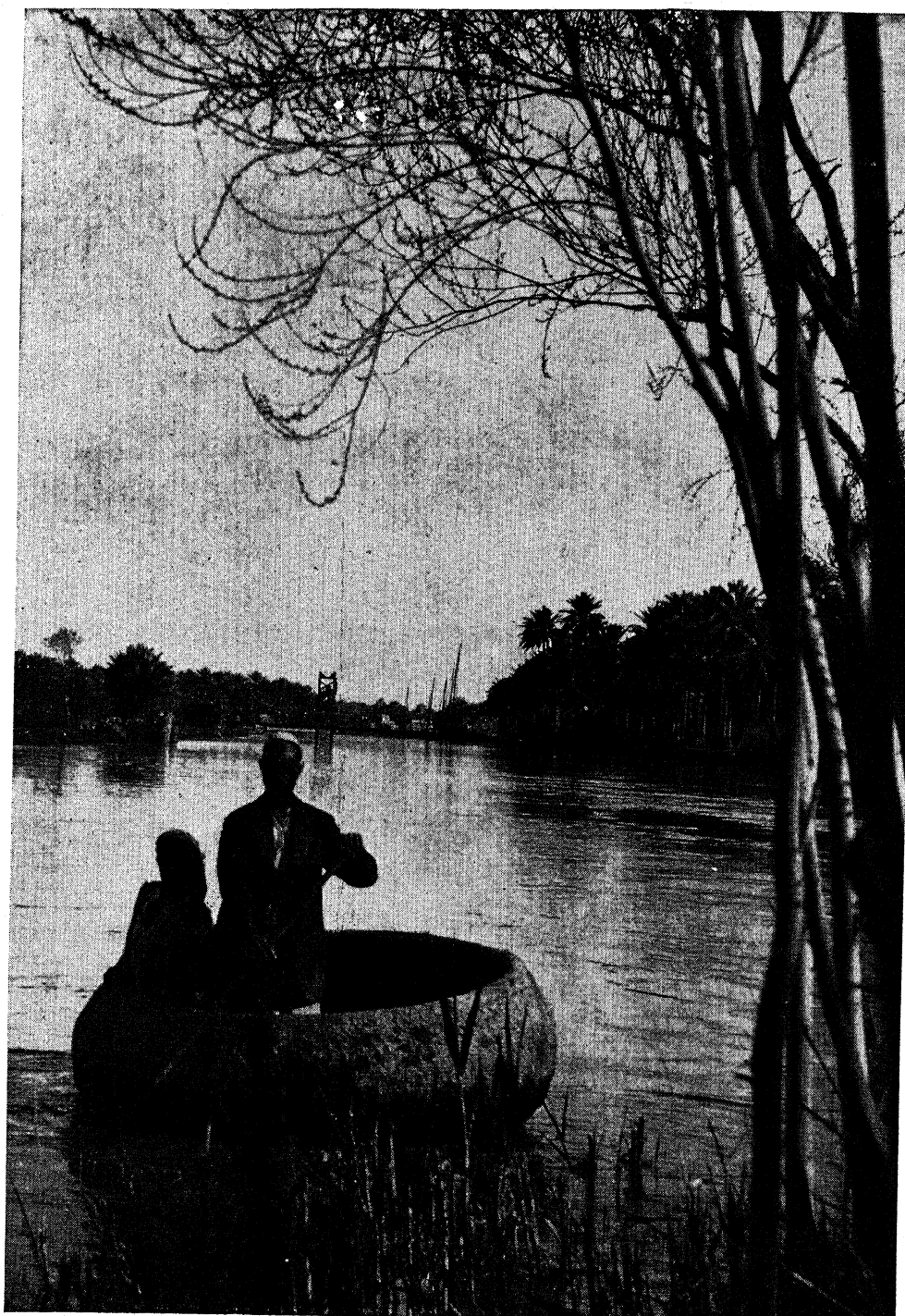
Such a boat is a common sight on the Tigris and Euphrates rivers in Iraq, but is there called a gufa. The gufa is built of wicker covered with hides and made waterproof with a coating of bitumen or pitch, springs of which are found welling out of the ground in that country. Some gufas are built large enough to carry sheep and asses.



REPUBLIC AVIATION CORP.

### "IT'S A BEAUTY!"—A NEW WAY TO GO FISHING

The neat and compact Republic Seabee amphibian plane seats four persons easily and can take off from either land or water. The propeller is at the rear of the plane and the engine is mounted just above and behind the cabin. Because of this arrangement, the passengers' view is never obstructed and the landscape can be seen clearly through the large-sized window.



EWING GALLOWAY

### THE GUFU, A STURDY BOAT USED ON THE EUPHRATES RIVER

The gufa, looking for all the world like a floating doughnut, is built of reeds waterproofed with a coating of tar. The surprising capacity of the tiny craft pictured is six or seven tons.



B.O.A.C.

**FISHERMEN BEACH** a flat-bottomed sailboat near Recife, Brazil. Though handling these light craft without keels is a difficult art, they are taken out into the open Atlantic.

As primitive as the coracle or the gufa is the boat used by the people of Tibet, that chill and lofty mountain land lying to the northeast of India. Here, owing to the great height, there are no large trees such as might be used for making dug-outs. The Tibetans therefore make a raft of logs and build up the sides so as to form a great oblong wooden box. This they cover with yak hides sewed together. In this way they achieve a boat large enough to carry not only men but horses.

For crossing rivers the people of Northern India use what they call a "mussuck." This is nothing but a goat skin sewed up and blown full of air. It looks horribly like a dead animal, but is light and buoyant. The native sits astride the mussuck and works it with a paddle.

Another skin-made boat is the Eskimo "kayak." It is made of sealskin stretched over a wooden or a whalebone frame, and is perhaps the smallest sea-going craft in the world, being about seventeen feet long and less than two feet in width. It holds

but one man, who uses a double-bladed paddle. Since a mere ripple would suffice to fill and swamp it, the dress of the paddler is joined to the deck covering to make the boat watertight. The Arctic explorer, Fridtjof Nansen, when stranded in the Far North, built for himself one of these kayaks and in it crossed a wide stretch of open water.

For longer voyages and heavier cargoes the Eskimos have devised the "umyak," which is built of driftwood ingeniously pieced and lashed together and covered with hides. Umyaks forty feet long are seen loaded with two or three families and all their worldly possessions. They are usually rowed by women.

As for reed boats, they are still sometimes used on the Upper Nile for crossing the river, and on Lake Titicaca, in Bolivia, a sheet of water sixty miles long, lying at the tremendous height of thirteen thousand feet above the sea. Some beautiful little models were discovered in an Egyptian tomb four thousand years ago which show that this type of boat was originally

## CRAFT, ANCIENT AND MODERN

a solid bundle of reeds on which one stood or sat. For all their frail look, reed boats are extremely buoyant and hard to sink.

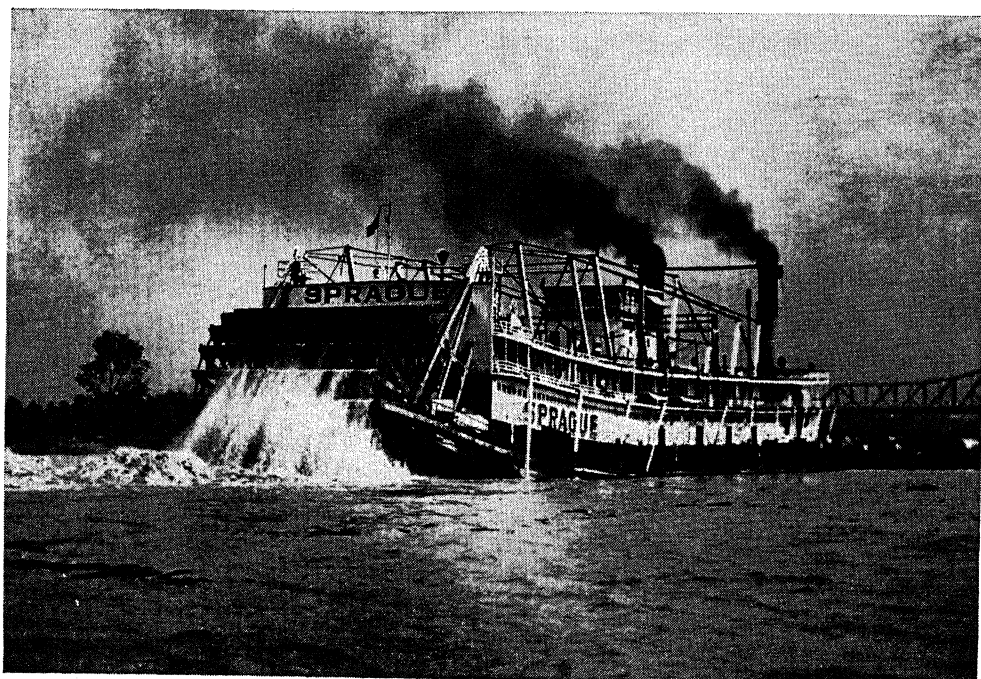
Thousands of years ago, when the Red Indian first came to North America, he found a country full of swift rivers and roaring rapids. He had to invent a boat fit to navigate rough water, yet light enough to be easily portaged or carried around the falls and from one stream to another. Thus, in the course of ages, he evolved the birchbark canoe which, of all craft, is the swiftest, lightest and most graceful.

The true Indian canoe is made of strips of birchbark fastened over a light wooden frame. The strips are sewed together with the fibrous roots of fir trees and the seams are made waterproof with resin. This canoe is the one savage boat which has been adopted by all civilized peoples, for in spite of its frail look it is wonderfully seaworthy. The so-called Maine canoes are copies of the original craft but

with stronger material such as canvas or thin wood to cover the framework. The Octoroon, which was but seventeen feet long and twenty-three inches broad, crossed the turbulent British Channel from Boulogne to Dover in eleven hours.

The Chinese were probably the first people to build seagoing ships of any size, and some say that they invented the mariner's compass centuries before European sailors had any idea of such an instrument. Another important invention of the Chinese was the centerboard, which can be let down so as to project under the keel of a vessel and thus keep it from drifting when sailing across the wind. The Chinese junk still has much the same shape as it had a thousand years ago and clumsy as it looks, with its high sides and square sails, it compares favorably with the craft which our own ancestors used no more than four hundred years ago.

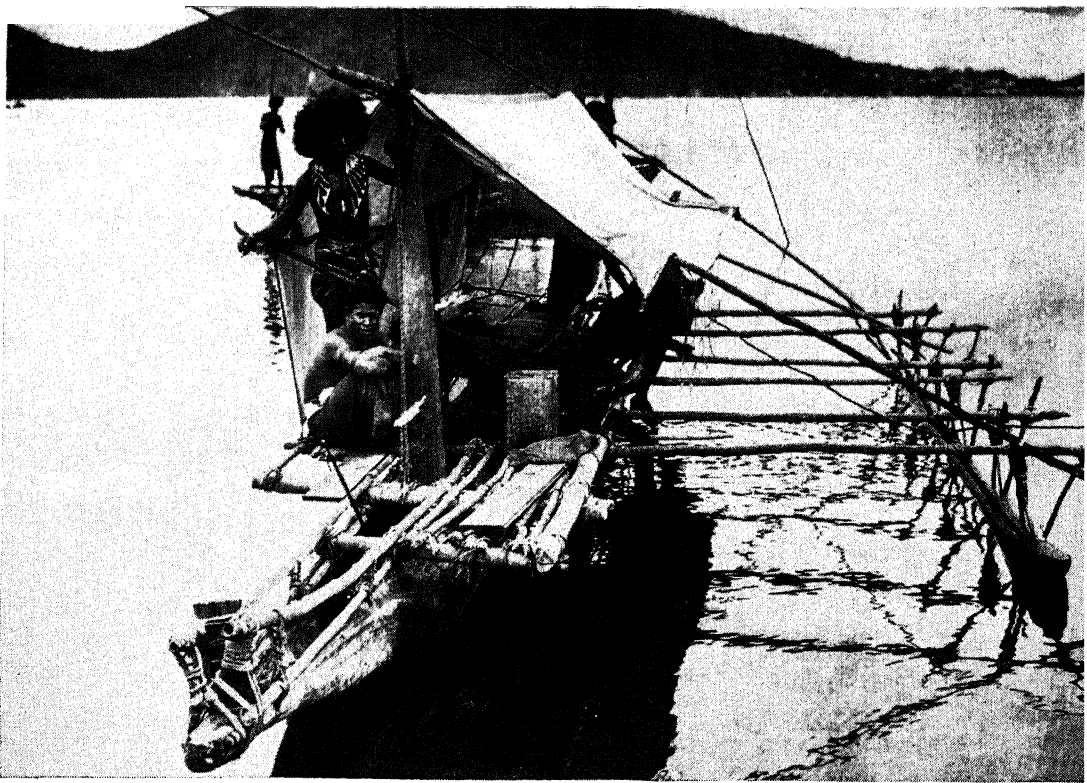
The best of the early white shipbuilders were the Norsemen. Their long ships



STANDARD OIL CO. (N. J.)

**STERN-WHEEL PADDLE-BOAT** on the Mississippi River. Such craft are especially suited to shallow water and have been in use on the broad, treacherous stream since about 1850.





EWING GALLOWAY

**PAPUAN SUN CANOE.** It is a dugout—hollowed out from a tree trunk. To keep it stable, the outrigger on the side serves as a balance. Outriggers are a common sight in the South Seas.

were powerful vessels—large enough to carry even cattle and horses. One of the great Norse chieftains, Olaf Tryggvesson, has left us a description of a long ship. It was one hundred and forty feet long, not counting the overhang at bow and stern, and had no fewer than thirty-four rowing benches.

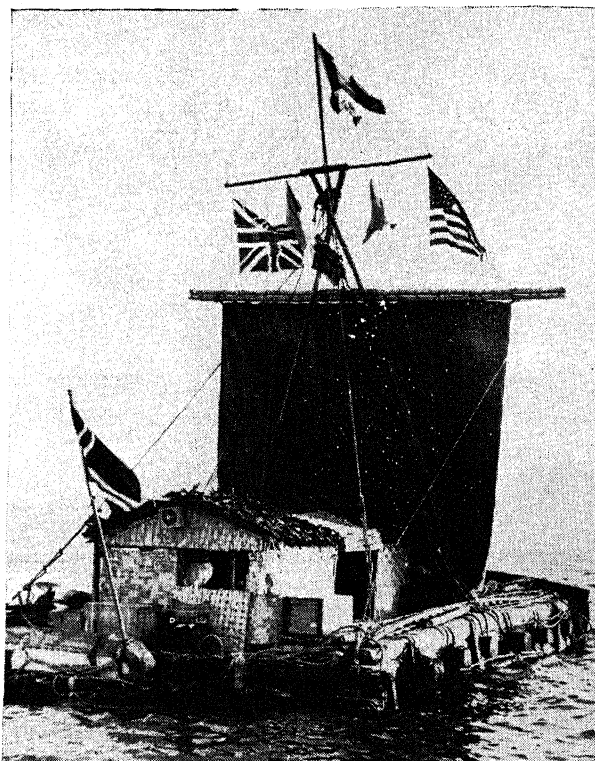
Columbus' flag ship, the Santa Maria, built five hundred years later, was but sixty-three feet long and inferior in every respect to the fine long ships of the eighth and ninth centuries. Models have been made and pictures painted of the Santa Maria, and she does look a clumsy vessel to have sailed so far.

Shipbuilding improved rapidly in the days of Queen Elizabeth, in the sixteenth century. The English began to construct fast ships and the Spaniards large ones. The galleons that brought silver and gold to Spain from South America were commonly of one thousand to twelve hundred tons burden, but the English ships, scarcely a quarter that size, possessed the advantage of far greater speed.

The great change in the eighteenth century was that frigates came into use, for these were lighter, swifter, more easily managed and better able to beat into the wind.

During the nineteenth century, the United States built the first really fast sailing ships. As long ago as 1821, the George of Salem came home to Boston from Calcutta in ninety-five days. At that time British East Indiamen took from five to eight months to make the much shorter passage from London to Calcutta.

In 1845 came the miracle of the Rainbow. This ship, the first of the real clippers, was built with sharp lines, raking masts and a great spread of canvas designed for speed, and her shape was so new that "old salts" vowed she was built against all the laws of Nature. Whereas the lines of the older ships had been those of the codfish, with round bows and flat bottom, this new vessel had her greatest breadth amidships, and a bow and stern narrowed delicately. A crowd



BLACK STAR

#### THE KON-TIKI, WHICH BRAVED THE PACIFIC

In 1947 this frail-looking raft carried six adventurous Scandinavian scientists from South America to Polynesia. The craft is made of balsa logs, with a bamboo cabin.

Today it is in a museum just outside Oslo, Norway.

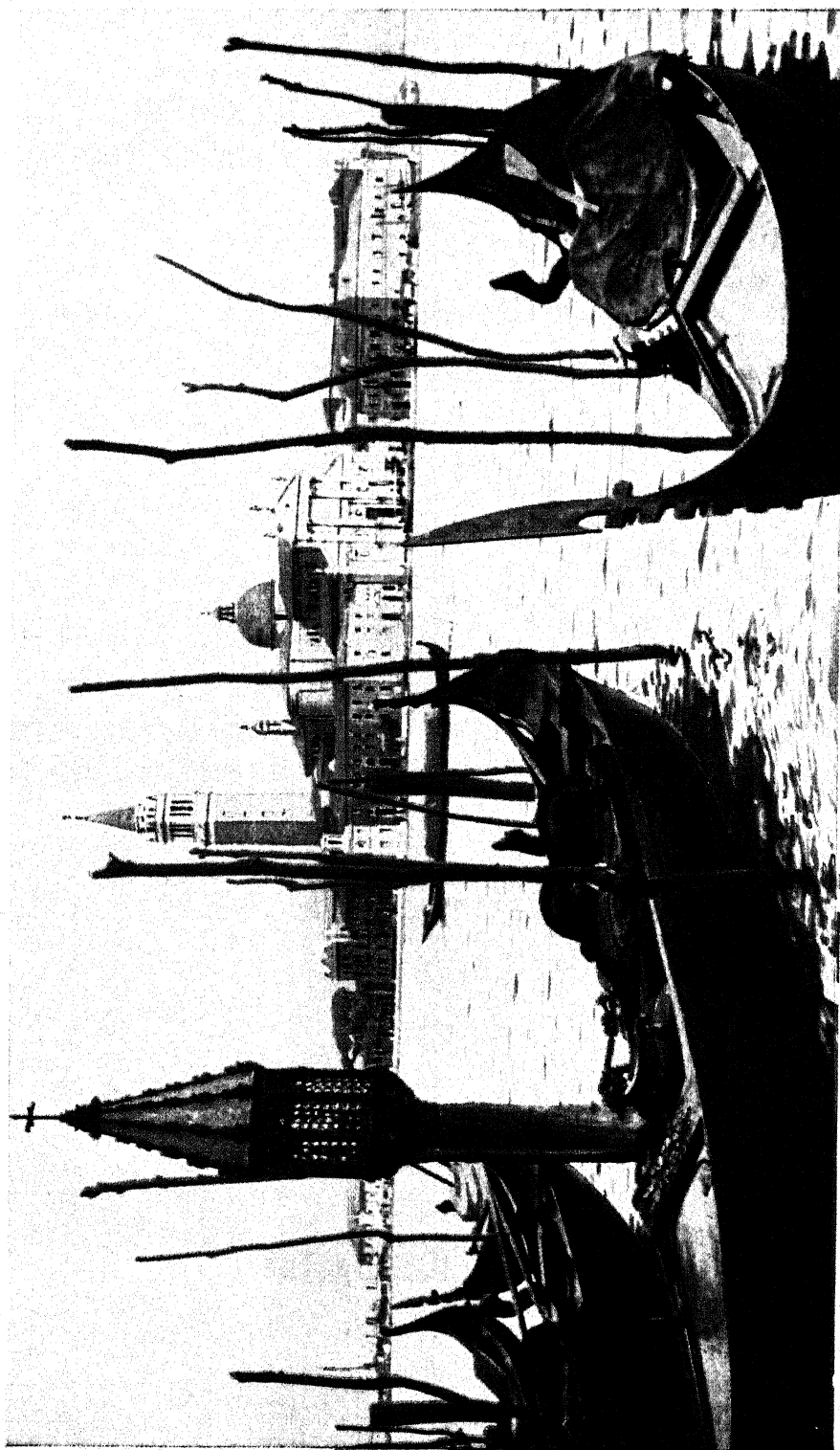
gathered to see her start, fully expecting that she would capsize at the first gust of wind. She sailed in February for China, and was home again in September with a cargo worth twice what she had cost to build. The greatest speed ever recorded of a sailing vessel was twenty-one knots. (A knot is a unit of speed of one sea mile or about one and a seventh land miles an hour.)

Before we leave craft propelled by sails, let us mention sailing yachts, pleasure boats first devised by the Dutch East India Company in the seventeenth century. There are two types—one the racer, with fine lines and large sails, and the other the more commodious cruising yacht. In 1910 the United States sent a racing schooner, the *Westward*, to Europe, which won each of the eleven races

in which she started. In 1911 four cutters of a third the tonnage appeared, and in 1920 a compact racing yacht a third their tonnage (thirty-five tons). A triangular or Bermudian rigged yacht is today favored by English sportsmen. Since the twenties, the United States has been developing yachting along two lines, that of the small boat no more than fifteen and a half feet on the waterline and that of the durable combination racing and cruising schooner designed for long distance contests.

In the year 1819 the British schooner, *Contract*, was in mid-Atlantic when her lookout sighted on the horizon a ship apparently on fire. The *Contract* at once started to the rescue, but when she came nearer her captain was amazed to see that the column of smoke issued from a tall funnel. The strange ship drew rapidly away and soon disappeared. In point of fact, the vessel that had so startled the crew of the *Contract* was the *Savannah*,

the first ship which ever crossed the Atlantic by steam. It was then but twelve years since the *Clermont*, the first steamboat designed by Robert Fulton, had startled New York City. Once it was proved that steam could be used for driving ships in the open sea, many firms began to build steamers. The first transatlantic race in which steamers were engaged was in 1829, when the *Sirius*, a 700-ton ship, left Cork for New York, and four days later the *Great Western*, of 1,340 tons, left Bristol. Both reached New York on the same day. Nine years later the British government asked for tenders for conveying the mail to America by steam, and Samuel Cunard, a Quaker shipowner and civil engineer of Halifax, Nova Scotia, at once determined to offer. He came to England, got in touch with



HERBERT FELTON

**THE GONDOLAS OF VENICE** have the distinctive bow found, in some form, in most boats native to the Mediterranean. The origin may have been the ram used on the ancient galleys, though at present, since it is the highest point in the craft, it serves as a sighting post when going under

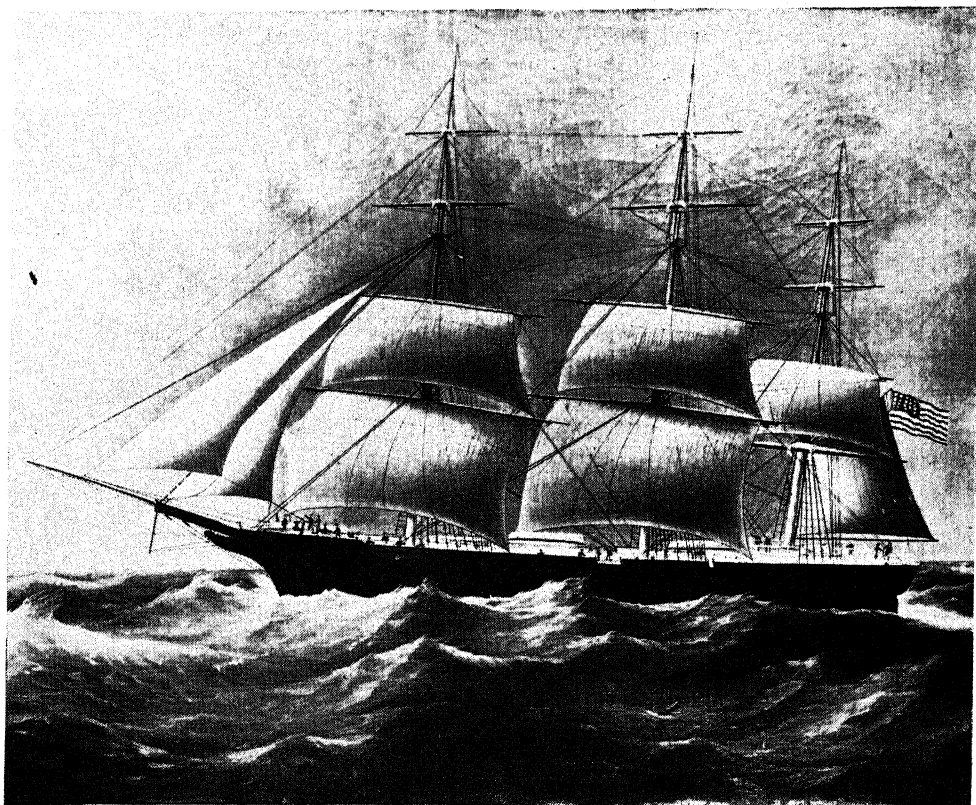
the many low arched bridges. The gondola is purposely built with a twisted stern which acts as a rudder against the pull of the single oar with which it is rowed. The curved rest for the oar is seen outlined against the water on the starboard side. Some motorboats are seen on the canals.



PAN AMERICAN AIRWAYS

#### A UNIQUE BARK FLOATING ON LAKE TITICACA IN SOUTH AMERICA

The boat and fan-shaped sail are made of the reeds that grow along the shores of the mountain lake. It is more than twelve thousand feet up in the Andes between Bolivia and Peru.



**THE SWIFT CLIPPER SHIPS** of the nineteenth century, like the *Cowper* of Boston, were marked by a long, sharp bow, deep keel, towering masts and a tremendous spread of sail.

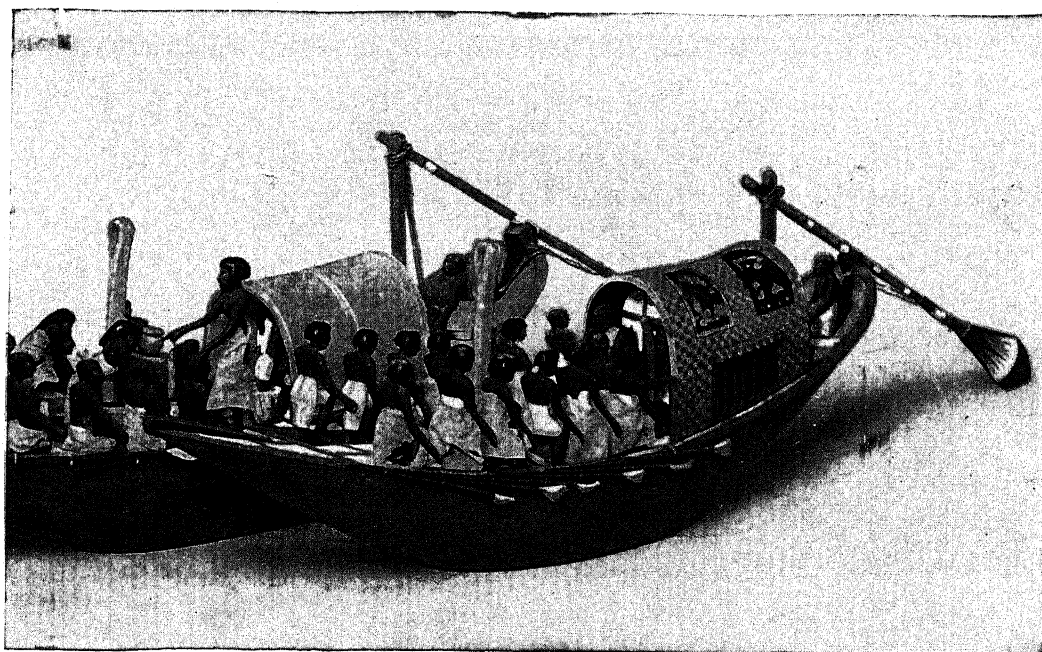
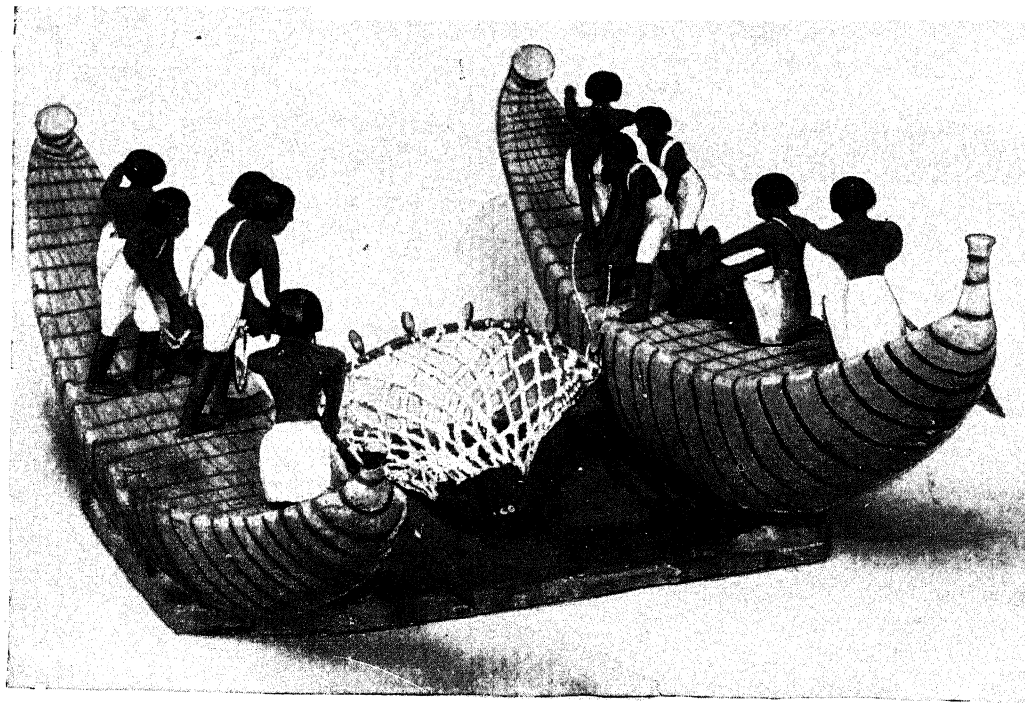
Sir George Burns and David McIver, and the three between them formed the Cunard Company. With a capital of about \$1,000,000, they built four steamers of just over a thousand tons each. These were driven by paddle wheels and they took nearly three weeks to cross the Atlantic. The first voyage was made by the *Britannia* in 1840. Then began the Cunard Line, which owned many vessels appropriately called floating palaces—the “ancestors” of such great modern liners as the *Queen Mary*, *Queen Elizabeth* and *Mauretania*.

About this time iron began to be used in place of wood for building steamships. A few small vessels had been built of iron early in the nineteenth century, and one, the *Garry Owen*, having been wrecked on her first voyage, was found to be still watertight, although wooden ships, wrecked at the same time, were pounded

to bits by the waves. In spite of this proof of superior strength, steamships were still built of timber until it was found that the limit in length of a wooden ship was about 275 feet. If built larger it buckled. The only substitute was iron, and what seems wonderful is that the use of iron instead of wood means a saving of at least a third in the weight of the hull.

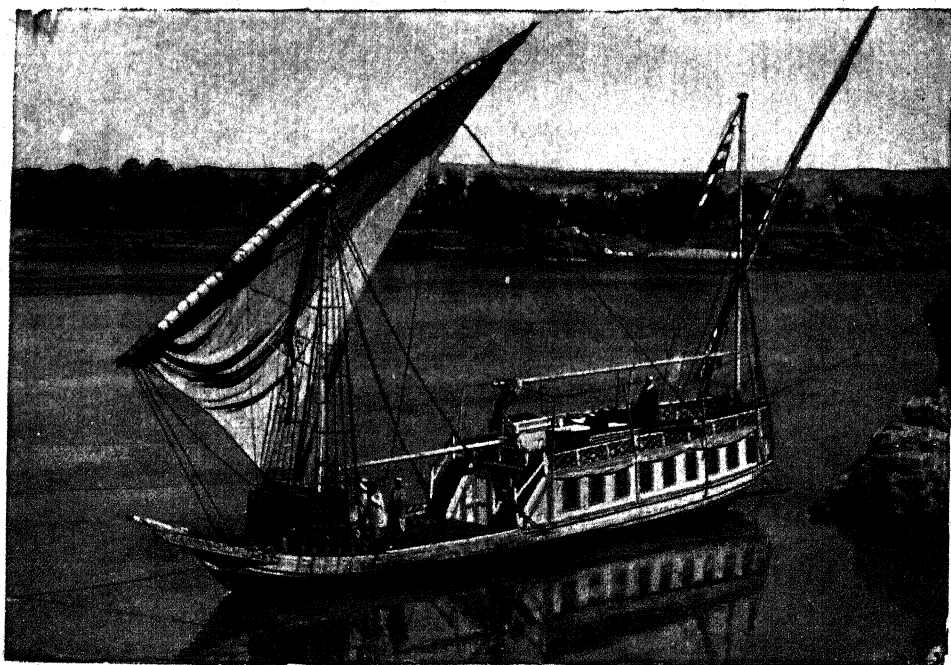
Steel, being stronger and lighter, gradually took the place of iron. It is said that the first steel steamer ever built was the *Ma Robert*, constructed in the middle of last century for the great missionary, David Livingstone, and used by him for traveling on the Zambezi River in Africa. The first of the big steel Atlantic liners was the *Cunarder Servia*, of 7,000 tons burden and nearly 17 knots speed, built in 1881. Ten years later nearly all new ships were being built of steel, and





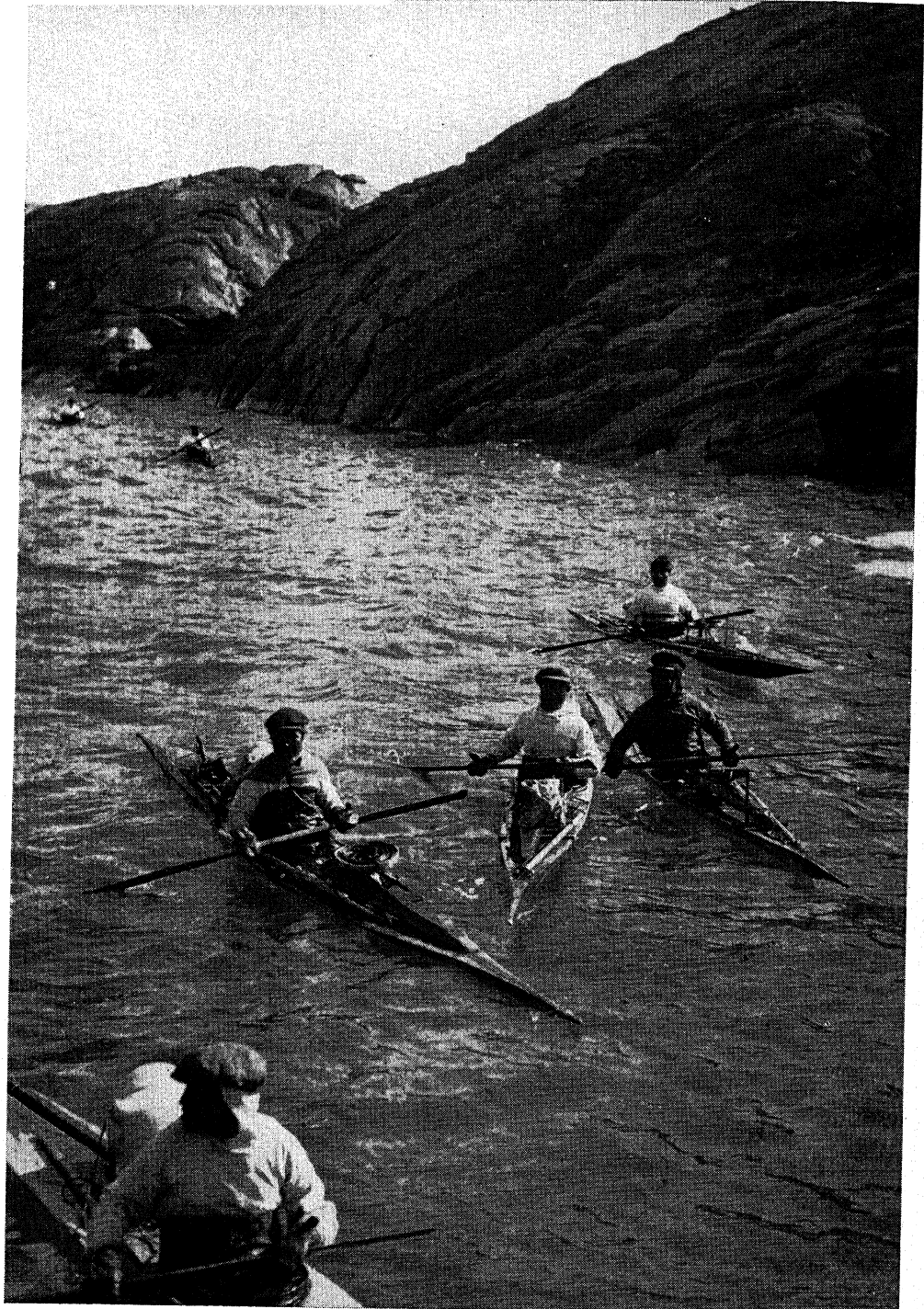
METROPOLITAN MUSEUM, N. Y.

**THESE REMARKABLE MODELS**, found in an Egyptian tomb four thousand years old, show (above) how the table of a wealthy man like Mehenkwtetre was supplied with fish caught in a seine dragged between two canoes with spear-shaped paddles; and (below) how at meal-time the sailors of his traveling square-sailed boat moored the kitchen-tender alongside.



© E. N. A.

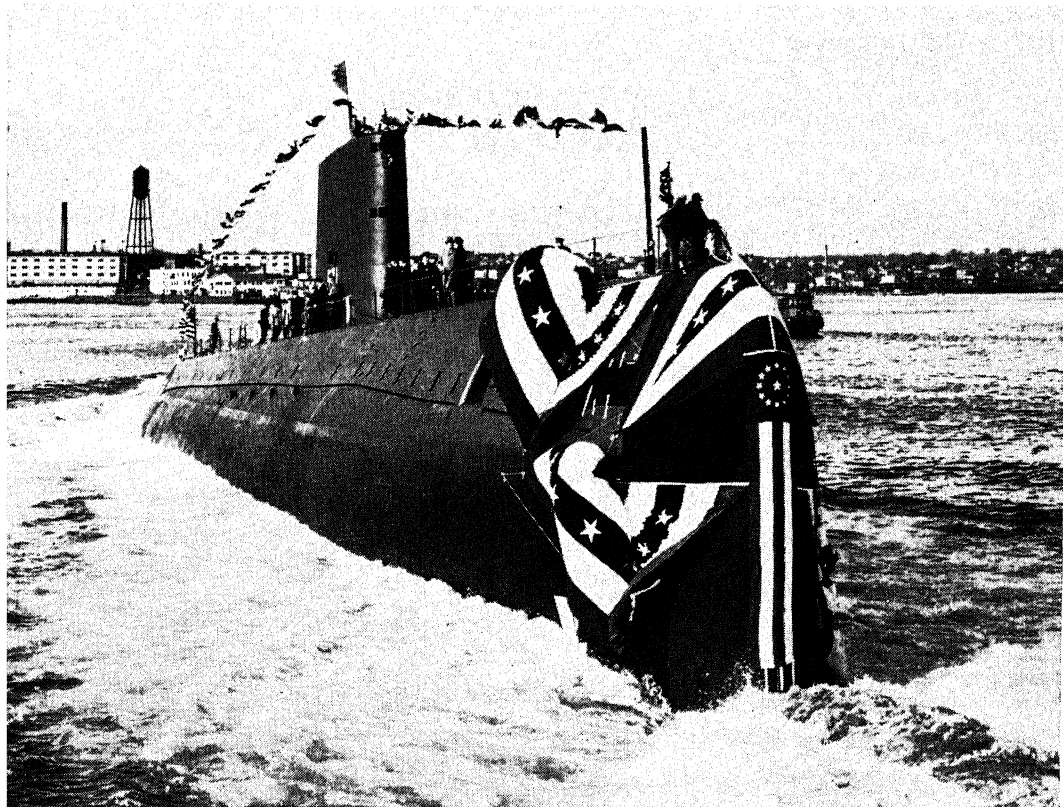
**DAHABIYEHs AND FELUCCAS**, are the most familiar boats seen on the Nile. The dahabiyeh shown in the upper photograph is a bargelike houseboat with sails. It resembles the painted galleys on the tombs of the Pharaohs. To-day it is used by tourists and by wealthy natives. The felucca shown below is a swift craft, built of acacia and sycamore.



PHILIP GENDREAU

**THE ESKIMO KAYAK IS ONE OF THE MIRACLES OF BOAT BUILDING**

Consisting of sealskin stretched over a light frame of wood or whalebone, the kayak is watertight when the paddler is seated. Though it may capsize, it is easily turned upright.



U. S. NAVY

**LAUNCHING** the world's first atomic submarine, the U.S.S. Nautilus, opened a new era in naval history. The Nautilus bears the same name as Robert Fulton's submarine built in 1801.

ever since then the size of such vessels has been increasing, until now we have floating cities of eighty thousand tons.

It was the coming of steam that made modern battleships what they are. The first steam vessels built were all small craft, mere tenders, in fact. The earliest steam fighting ship was the war sloop *Rattler*, built at Sheerness in 1843, a vessel of just over one thousand tons. She was also the first warship to be driven by a screw instead of paddle wheels. The Admiralty had little belief in the screw, but the builder of the *Rattler* persuaded the authorities to arrange a tug-of-war with the *Alecto*, a paddle ship of similar size and power; then, although the *Alecto*'s engines were driven at their full power in the opposite direction, the screw boat towed her stern foremost at nearly three miles an hour.

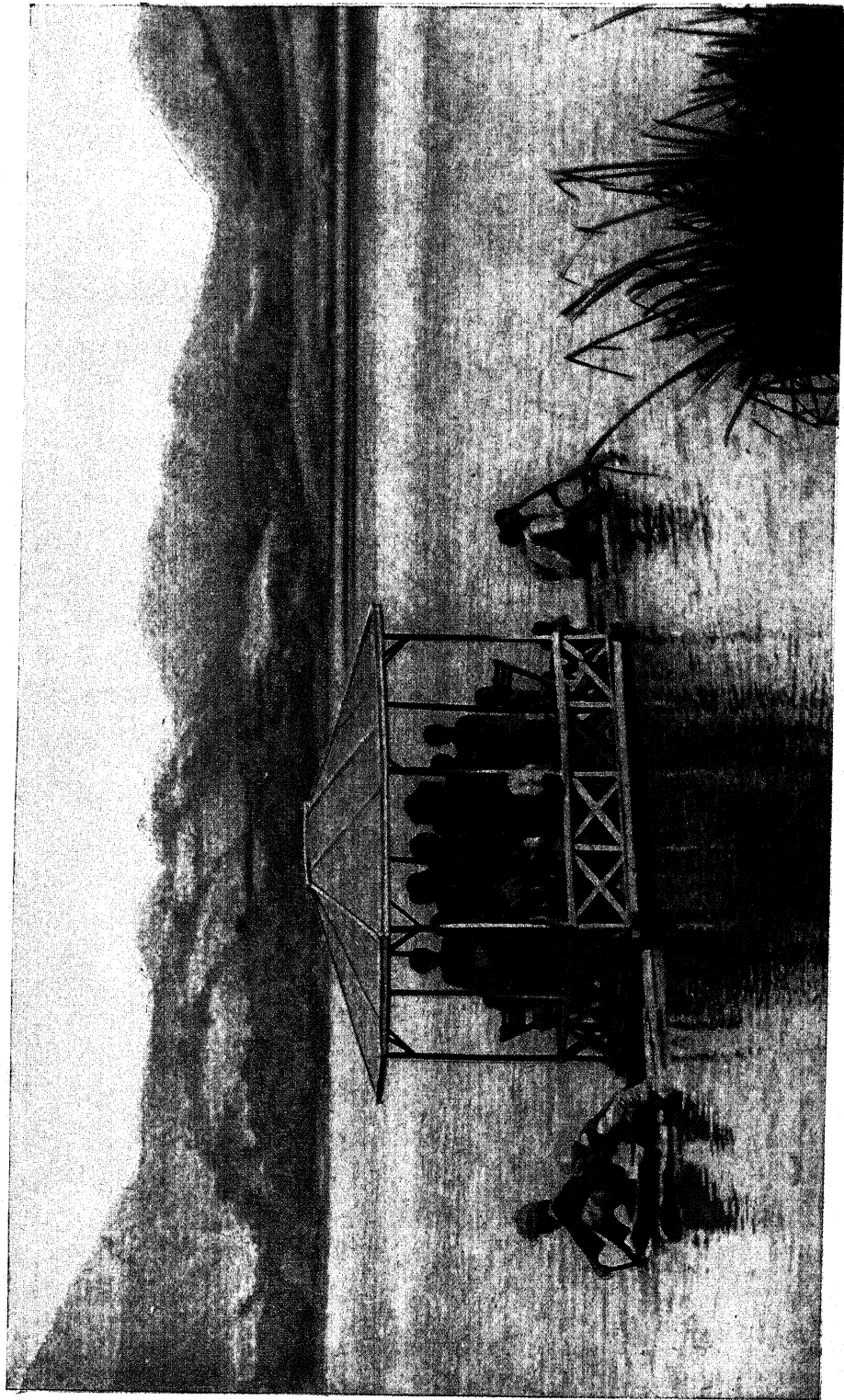
The first iron warship was built in

England in 1842. During the American Civil War of 1861-65 it was proved that the wooden warship was quite useless and out of date, for the steel ram *Merrimac* was more than a match for all the big wooden vessels brought against her, though she was defeated by the smaller iron-clad *Monitor*.

As a result there came a demand for fighting ships fitted with enormous metal rams and with turrets on deck covered with heavy iron-plating. After 1890 battleships were built of steel and rapidly grew larger and faster and in every way more powerful.

Submarines have been the dream of inventors for three hundred years. A one-man affair was devised by David Bushnell in 1775, but he could stay under water only half an hour without suffocating. A submarine capable of carrying four hours' supply of air was built by



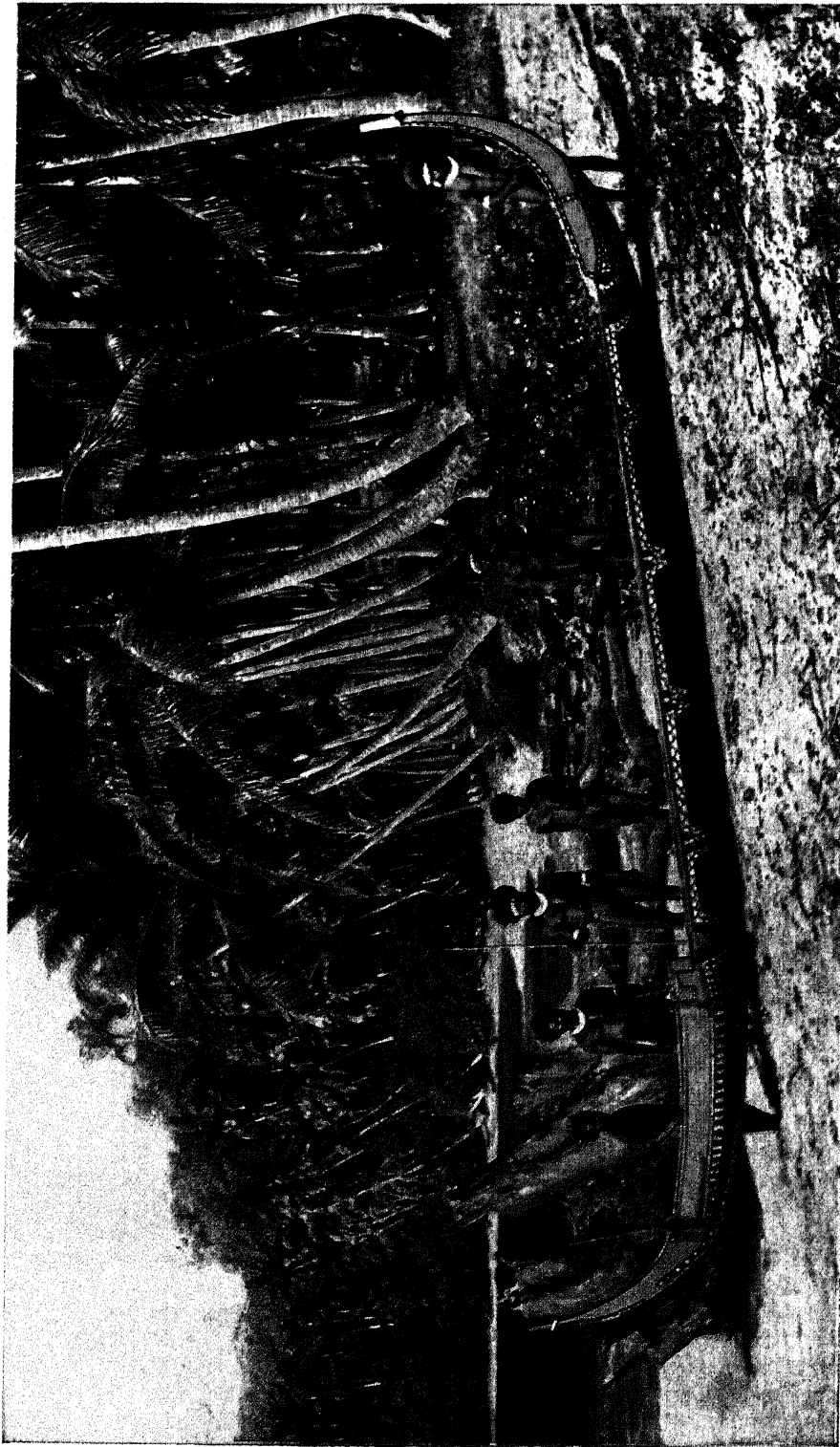


© EWING GALLOWAY

**ON JAVA'S LAKES** passengers who are not in any kind of hurry are ferried over in a contrivance that is really more a luxurious raft than a boat. Two dugout canoes support the platform shown above. Owing to its great resistance to the air, such an arrangement is safe only so long as

the passengers keep quiet and distribute their weight evenly. It would be impossible in a high wind blowing at all contrary to the course steered by the paddlers. One kind of Samoan sea-going vessel is an elaboration of this idea, with a mast and a superstructure added.





© E. H. A.

**A SOLOMON ISLAND CANOE** is a dugout cut from a single trunk of a palm tree. It has prow and stern built on separately at the ends of the hollowed palm trunks, and a cigar-shaped bottom designed for easy launching. Though easily launched, this craft differs from most Pacific

Island canoes in lacking an outrigger, and considerable skill is needed by the crew to prevent it from capsizing. The paddlers kneel in a double row of ten or fifteen, according to the length of the canoe. The highly ornamented gunwale indicates that the canoe is a war craft.

## CRAFT, ANCIENT AND MODERN

Robert Fulton in 1801. It was called the Nautilus, and when tried remained safely twenty-five feet under water for several hours. Fulton built it in France to be used against the English, and if Napoleon Bonaparte had had foresight enough to realize its value, the whole course of history might have been altered. But Napoleon would not back Fulton in building submarines.

### *The First Submarine*

The modern submarine dates from 1888, when the French designer, Lédé, constructed the Gymnote, a vessel sixty feet long, driven by electric power. This was also the first submarine to be fitted with hydroplanes, or horizontal rudders, to help her to sink. Perhaps the success of the modern submarine boat owes more to John Holland, an American citizen of Irish birth, than to anyone else.

Since World War I, the motor vessel has increased in size and speed, and the steam engine is being replaced more and more by Diesel and other oil motors. Oil fuel is cleaner to use than coal, and it can be easily pumped into a vessel's fuel tanks. Since oil takes far less space to store, an oil-burning ship can carry additional cargo, which makes it a more profitable ship to run.

Improvements are constantly being made in the direction of standardizing the construction of vessels so as to reduce the cost of building and operating them. There is a new type of steel which can experience a stress of fifteen tons per square inch. By the latest methods of constructing oil tankers, the frames and beams supporting the shell and deck-plating are arranged longitudinally so as to afford support in the direction of greatest stress.

### *The Great Atlantic Liners*

The size and speed of the great Atlantic liners have been a matter of keen rivalry between the various shipping companies. At the turn of the century the fastest vessels were German. In 1900 the Deutschland made a record when it crossed the Atlantic in something under

six days. That record was bettered by a number of ships in the course of the twentieth century, including the British ships Mauretania and Queen Mary, the French ship Normandie, the German ships Bremen and Europa and the Italian ships Rex and Conte di Savoia. The world's record for the fastest Atlantic crossing is now held by the United States. In 1952 she made the trip from Ambrose Channel Lightship, off New York, to Bishop's Rock, off Southampton, in 3 days, 10 hours and 40 minutes, running at an average speed of 35.59 knots (almost 41 miles) an hour.

The modern passenger liner is a marvel of mechanical invention. A device which contributes greatly to efficiency of performance is the gyroscope, which is used in connection with automatic steering apparatus and ship stabilizers. There is also a device to minimize the effects of vibration that will be welcome to those who suffer from sea-sickness. This is a hydraulic transmission gear between the motor and the ship's propeller. This improvement, coupled with the use of the radio and the various life-saving appliances, makes of seacraft a vastly different proposition from the dugout of primitive mankind.

### *The Ponderous Ice Breaker*

The slow-moving ice breaker Krassin was a craft that sailed into the limelight at the time of the Nobile Expedition. Where other ships were stopped by solid masses of drift ice, the bulky Krassin battered her way with the drive of her 10,000 horse power engines behind her massive steel hull and where aeroplanes had been unable to land, the Krassin smashed her way through soft and ragged ice floes. Canada uses ice breakers in the St. Lawrence and the United States, on the Great Lakes, when ice impedes navigation. Most ice breakers are equipped with huge water-tanks that can be filled when it is necessary to increase the weight of the ice-crushing ship, or to roll the ship that it may smash itself free. There are ice breakers capable of smashing ice which is both discouragingly solid and astoundingly thick, quite as a matter of course.

# HATS AND THEIR WEARERS

## *Man's Devices for Covering His Head*

Headgear is, and always has been, variously worn for one of these groups of reasons—for protection against sun, rain, wind, sand, cold, mosquitoes or armed human foes; for religious ceremonials; or for style, coquetry, mourning or to accent the wearer's power and place. The earliest form of headdress was probably the skin of some animal or a leaf thrown over the head, but this did not remain firmly in position, and so the hat which roughly fitted the head was evolved. The earliest hats or caps of the Greeks and Romans were quite plain, but as time went on more ornamentation was used and the designs became more elaborate. In this chapter we shall see representative headdresses, practical or fantastic, worn by various peoples, savage or civilized.

**T**HE first hat was probably a broad leaf designed to keep off the burning rays of the sun. Then human ingenuity thought of making a hole in the middle of the leaf to fit the shape of the head and of substituting for the leaf a round disk of felt or skin. One of the oldest known forms of headdress was a close-fitting cap of Sumerian origin worn by the Palestinian captives in the Assyrian age, but on images of the moon god Sin the hat had a straight brim like a low-crowned bowler, or derby.

The ancient Ethiopians stuck a feather in front of a fillet; and western Asiatics from Arabia to Persia bedecked themselves with a full-feathered crown. The Semites, on the other hand, usually covered the head with a cloth which came, in time, to fall over the nape and to be kept in place with a band. This headgear evolved into a cloth cap with ear lappets. The Persians

wore a conical cap like a cock's comb; the Assyrians, metal helmets, and the Hittite warriors protected their heads with spherical hats. The Babylonian kings

were addicted to pointed helmets with two great horns attached thereto, by way of emphasizing their formidable majesty. Jewish priests adopted a conical cap.

Most ancient women wore hoods. Greek women usually covered their heads by drawing up their himations, although sometimes they wore separate pieces of cloth, a veil, a cap, a fillet or a crown to hold the hair in place. Indeed, the simple crown, highest above the forehead, evolved into an extraordinary high crown made of wickerwork, laurel or olive.

In early Germany a hood was the usual head covering, worn in bad weather but otherwise allowed to hang down the back, sometimes as far as the calf, in which case the peak of the bonnet



AUSTRALIAN OFFICIAL PHOTO

### A VILLAGE TUL-TUL

The Tul-tul is a sort of village "first vice-president," serving as assistant to the chief. The Tul-tul above is dressed for a formal feast in his robes of office.



HAECKEL

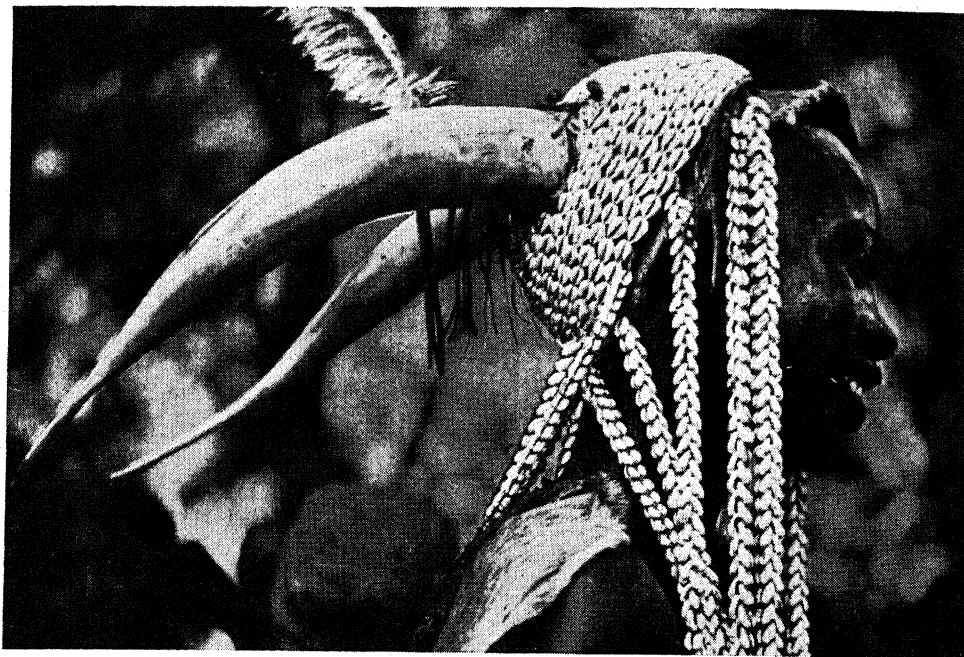
IN THE BLACK FOREST of Germany, some of the colorful festival costumes of bygone days have been preserved. Every valley once had a style of its own. The young lady displays the scarlet chimney-pot hat of the Elze Valley. The girls of other valleys wore white hats covered with enormous black or red pompons, or bead coronets shaped like flattened balls.



PARIKAS

IN ESTONIA, one of the Baltic states, the old-fashioned bride wore a gaily striped skirt and beautiful lace and embroidery. However, the crowning glory of her vivid costume was her hat. Shaped like a basin, it was covered with dangling balls of many-colored glass and trimmed with bunches of feathers. She walked erect indeed in order to balance her elegant burden.





BRITISH INFORMATION SERVICES

**THE YOUNG MEN** of the Konkomba tribe in the Gold Coast use hats for decoration. They make their headdress by attaching horns, feathers and strings of cowry shells to a cap.

ended in a stuffed tail. This hood was usually made of cloth or pliant leather and often lined with fur and trimmed with erect plumes and metal bugles. The early Spanish hood became, at its lower edge, a shoulder cape. The Persian cap was deep enough to reach to the eyebrows in front and to the nape of the neck behind.

When a Roman slave was granted his freedom, his head was shaven and a red pileus, or woolen cap, was placed upon it in token that his days of servitude were at an end. The cap has been associated with freedom for a long time. The leaders of the French Revolution adopted the Phrygian cap, a hood of felt or leather, as a symbol of their fight for freedom. The traditional figure of Liberty on a coin or a statue shows her with the cap of a workman on her head. Caps were the usual headgear of the men of the Celtic and Gothic races before the tenth century. At one time, too, a Swedish political party was derisively called the Nightcaps, or, later, Caps, while the opposition was known as Hats, from the tricorns worn by officers and gentlemen. In the seventeenth century

parties in the States came to be known by their dress, and the Puritans wore wide-brimmed high-crowned hats without band or feather, while the Cavaliers appeared with feathered hats on their long hair.

The wide hats crowned with plumes eventually became reduced to flat caps with feathers at the sides, then caps with slashed edges bushed out with feathers. Plain folk of course wore plain caps.

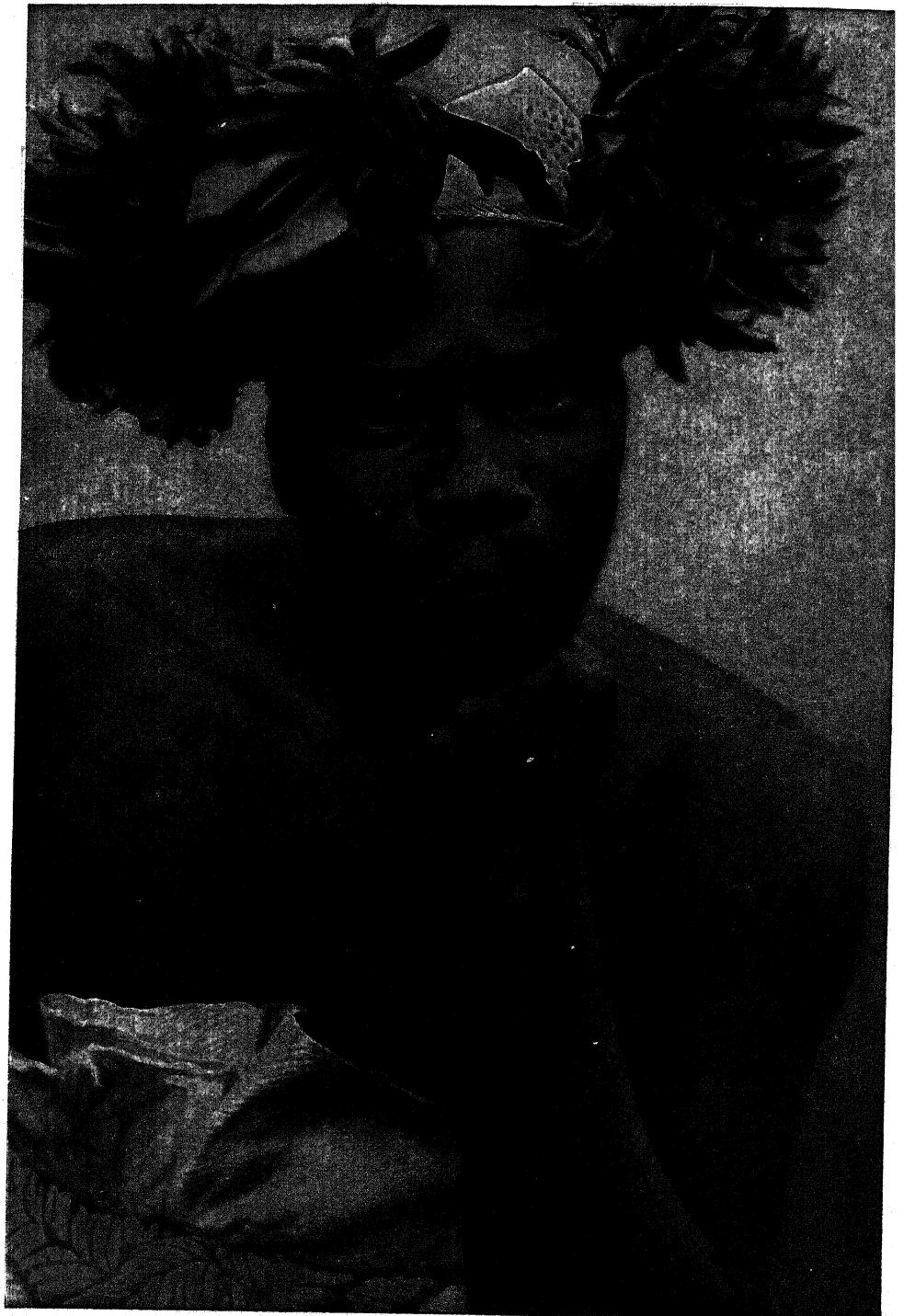
The cap has also played its part in fable and fairy tale. Was there not the wishing-cap that the sultan of old gave to Fortunatus, which the lucky possessor had but to place upon his head to find himself conveyed to whersoever he desired? Then there was the windy-cap of Eric, king of Sweden, who, merely by turning this cap in a certain direction, could cause the wind to blow from that quarter. This old legend survives today in the "capful of wind" about which sailors talk.

When the Scotch Highlanders see an eddy of wind whirling the dust and leaves about, when the day is otherwise quiet, they say the fairies are trying to whirl someone away, and they hurl their bonnets



PALMER PICTURES

A HONG KONG HOUSEWIFE may toil hard and long but her headgear is nonetheless fashionably elaborate—pleated cloth half covering the face and hanging from a big hoop.



AMERICAN MUSEUM OF NATURAL HISTORY

**FEATHERS AND LEAVES** on a crown of woven palm enhance the dignity of a central African chief. Many native leaders today, and their people as well, are taking on the habits and dress of Europe and America. Young Africans attend modern colleges and universities abroad and return to their homelands anxious to apply all that they have learned.

## HATS AND THEIR WEARERS

to make the fairies drop their booty. Indeed, the custom of flinging a hat at a whirlwind is also practiced in Germany and Esthonia. The Scotch cloth cap or "bonnet" bore a sprig of heather; to this the chiefs added an eagle's feather.

### *"A Feather in Your Cap"*

How often one hears the expression, "It's a feather in your cap!" It was once the custom among certain peoples to add a feather to the headgear for every enemy slain; and even now a successful sportsman may stick in his hat or cap a feather from the bird he has brought down.

Another phrase we often hear is "donning cap and bells," which means amusing people by playing the fool. This phrase originated in the Middle Ages when kings and great nobles kept a jester or court fool, who wore a special cap and had bells fastened to his costume. This cap was usually a hood as well and fitted tightly over neck and shoulders, while up the back ran a piece of material shaped like a cock's comb and at each side sprang two long donkey's ears of cloth.

Gradually the cap became a symbol of high renown. The Cap of Maintenance was an emblem of ducal rank. The Pope conferred it as a symbol of honor three times on Henry VII and once on Henry VIII.

### *A Symbol of Trust*

The modern practice of lifting the hat as a gesture of respect dates from medieval times. When an armored knight entered an assemblage of friends he removed his helmet and so exposed the most vulnerable part of his person by way of signifying his trust in those present.

The pilgrim's hat was called a cockle because devout men put cockle-shells upon their hats to indicate their intention of going on a pilgrimage. On one of the walls of the old Palace of Westminster was found a painting of a pilgrim with his cockle-hat, which was covered with the same skin, ermine, apparently, that formed his coat.

In Friesland, a province of the Netherlands, the people used to place upon

the head first a knitted cap, then a tall silk skull cap, third, a metal turban which was a shrunk form of helmet, and over this array an immense scarlet bonnet.

We are told that Henry VIII wore a bonnet ornamented with silver, gold and feathers when he attended a banquet at Westminster. At about the same time Milan bonnets came into fashion. They were so named because they were first made in the Italian duchy of Milan, whence also comes the modern word "milliner" (Milaner). These bonnets were made of cloth-of-gold and silver, velvet and satin, slashed and puffed as were the dresses, and decorated with gems and hanging ornaments.

### *Men's Hats Were Feathered*

In the reigns of Charles I and Charles II hat brims became much larger, so much so that they hung down over the face and ears. For this reason they were called "slouch" hats. These broad brims were ornamented with feathers all around, a fashion that persisted through the reigns of James II and William III. But the inconvenience caused by this floppy brim brought about a new mode. One portion of it was turned up at the front, back or side of the head—"cocked" in other words. In course of time two sides of the hat were turned up, and in the days of William and Mary a third portion was raised. Thus originated the cocked hat.

In this same reign and that of Queen Anne, the dandies wore wigs, and the great ladies caps so tall and elaborate that wearing a hat was impossible. However, a hat was used, but it was carried—a "chapeau-bras"—under the arm.

Women's hats, throughout the ages, have been even more interesting than those of men. As we have seen, hats and caps were really not in common use until the twelfth century, but by the fourteenth century many fashions had evolved, with increasing ornamentation. Now English women adopted a steeple-horned hat draped with a kerchief—the steeple being a long black cone worn at an angle of forty-five degrees, a fashion at first considered immoral. There followed sugar-



IN THE MIDDLE EAST, a girl carries her dowry on her head. She edges her close-fitting hat with overlapping coins, and hangs any others she may get from her chin-strap. When out of doors, she also wears an embroidered head-cloth that hangs over her shoulders.

© E. H. A.



A LADY OF CHILE models a manto, a combination of hood and cape like the Spanish mantilla. Visitors to Chile seldom see the handsome garment today, but on a Sunday in past years, tourists admired the women of even the latest fashion who wore the manto to church.





© E. N. A.

**AN ENORMOUS BOW** of black ribbon set with the tricolor cockade is worn by this woman of Alsace. We may see many like it in the districts south and west of Strasbourg whenever the gay national costume is worn. Sometimes we see it also in the parks of Paris, and then we may be quite certain that the wearer is an Alsatian nurse.



BLACK STAR

### A HAT TO CONCEAL JEALOUSY

At her marriage ceremony, a Japanese girl wears a *taka-shimada*, a bridal wig, and a *tsuno-kakushi*, a white turban. The outfit is supposed to hide the horns of jealousy that, according to old superstition, all brides have.

loaf and thimble-crowned hats with the brim turned up in various styles. In the late fourteenth and early fifteenth centuries a lady often covered her head and hair with a caul, which at first was a great bag of gold net enriched with gems. This structure was later stiffened with wires and made of other materials than net, and came to assume the most wonderful shapes. Sometimes it bore two great horns as much as fourteen inches in length that spread out sidewise or stood straight up above the head. Bossed cauls were also drawn high on the sides to make the face heart-shaped. A little later a butterfly headdress became popular. Here wires were set in the caul to

allow the veil to float behind. Women first wore the mob-cap in private. Then the French Revolution put a check on the extravagances of men and women alike, and with the vogue for simplicity came the towering mob-cap, an humble conception albeit adorned with lace and ribbon. Turbans of all materials, from lace scarfs to velvet, also came into popularity.

The saying "she sets her cap at him" comes to us from the days when ladies habitually wore caps and would naturally don the most becoming one in order to attract the attention and admiration of their favorite suitors. Early in the eighteenth century there was a shepherdess hat shaped like a saucer and perched upright on the hair but rising at the back. Women macaronis, for a time beginning in 1772, wore a towering headdress of flowers and feathers that fairly hit the chandeliers. Compare this with the attire of the gentleman savage on the first page of this article!

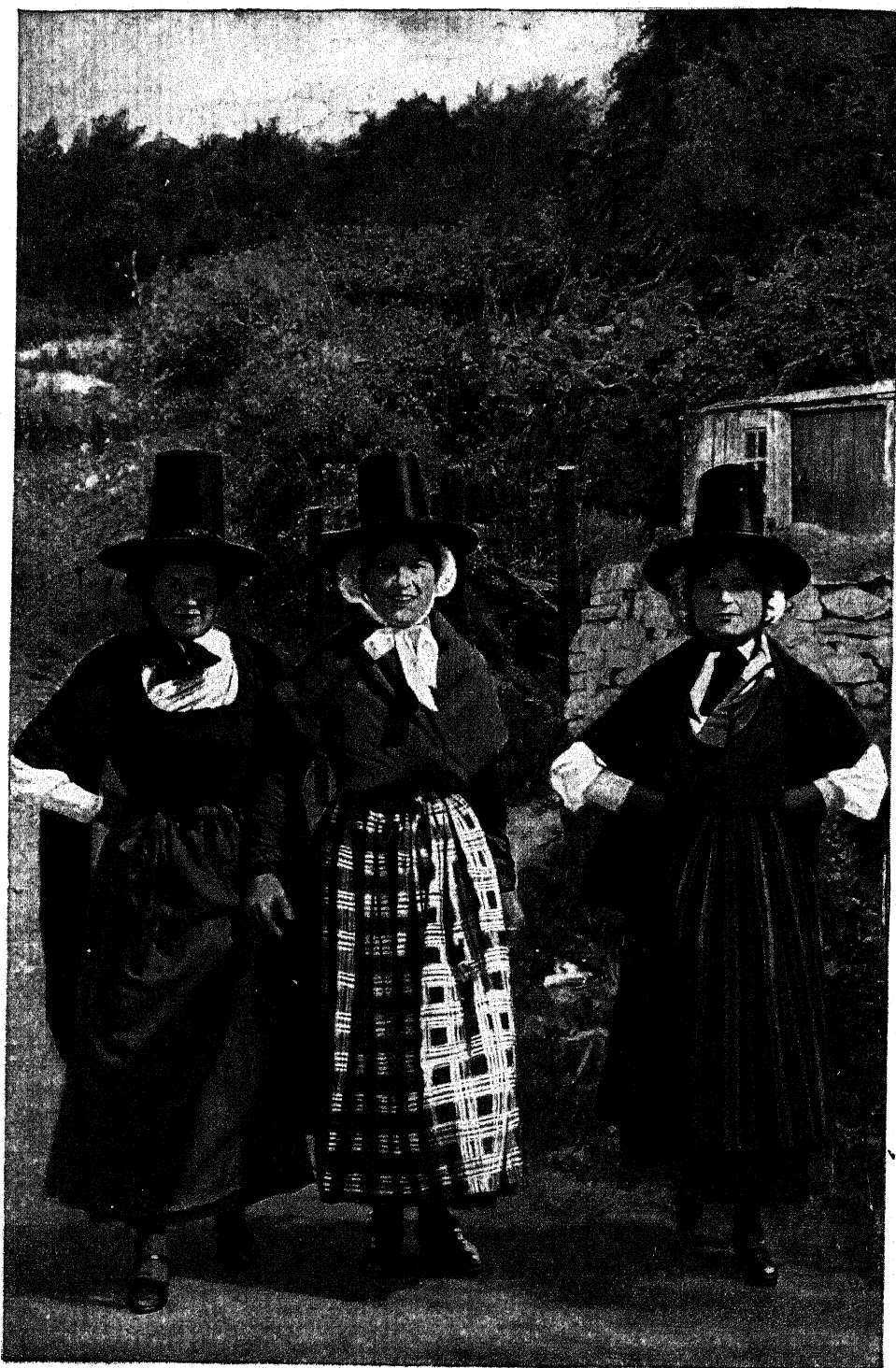
Toward the end of the eighteenth century there was another period of extraordinary hats. Women had for many years been wearing simple bonnets and caps. Then large powdered wigs came into fashion, and the caps grew, in order to cover them, into enormous starched erections of muslin and ribbons. Little hats were perched at a queer angle on the wigs, but these developed in the opposite way to the caps, for when the wigs became smaller the hats became really immense. The wigs were replaced at home by nightcaps of silk or velvet, and caps came to have long lace lappets or fan-shaped topknots. The capote was a bonnet first appearing in England at the beginning of the nineteenth century. At first it had a back of cloth and a peak of straw (much



BLACK STAR

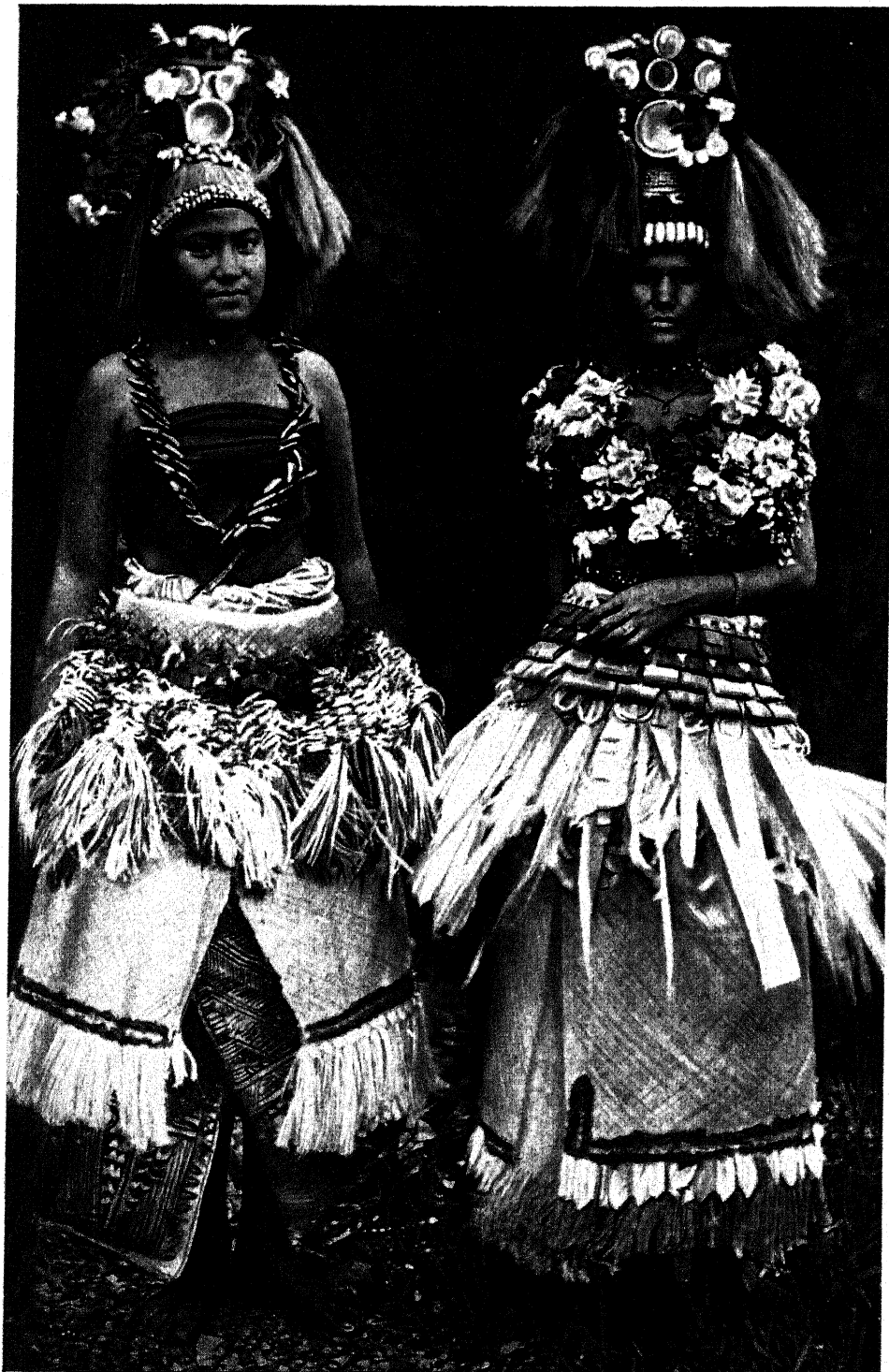
#### A HAT THAT IS A SYMBOL OF DIGNITY IN KOREA

The Korean man, especially a village elder, wears a hat made of horsehair or finely plaited bamboo. Black in color, it has a broad brim and a six-inch crown shaped like a flowerpot.



CUTLER

**CHIMNEY-POT HATS**, part of the old Welsh national costume, are today worn only at song festivals and other special occasions. There is usually a snow-white bonnet that frames the face beneath the black brim. As in most countries, such odd attire is definitely a thing of the past—more at home in the museum than in the everyday wardrobe.



© PUBLISHER'S PHOTO SERVICE

**GALA HATS IN SAMOA** are very elaborate. Those of these two girls of Pago Pago, on Tutuila, the one fine harbor of Samoa, are built up of shells and flowers, feathers, tow and plaques of mother-of-pearl. Samoan warriors have a similar headdress.





EWING GALLOWAY

### THE FLOWER OF FASHION IN DARKEST AFRICA

These fantastically dressed warriors in Uganda, British East Africa, are garbed in full ceremonial regalia. Their magnificent and startling headdress is made of ostrich feathers, which also decorate the shields they hold in front of them. Uganda, which is north of Lake Victoria, became a British protectorate in 1894. The most important native kingdom is Buganda.

like that of the later sun-bonnet of the United States of America). Later, it acquired a veil. The hat varied in shape until by 1818 it was composed of a frame of wood covered with satin or velvet and decorated with ribbons, flowers or feathers. By 1840 the capote had become close-fitting; then the upright plume again appeared, as the crown lowered and the

brim broadened. Some of the women's hats of the present day are faintly reminiscent of ancient styles, though modified to meet present-day conditions. The first open cars made automobile veils a necessity to keep large hats in place, and bobbed hair brought about snug-fitting hats that required no pins. Certain hats that followed were like the helmets of aviators.

# GIPSIES IN MANY LANDS

## *The Ways of Nomad and Vagrant Folk*

The true gipsies are a wandering people. Bands of them are found scattered through almost every country of the world, but more especially in lands of western Asia, Europe and northern Africa. They are believed to have originally come from India, and their language shows signs of having been derived from the ancient Sanskrit. When gipsies first appeared in Europe, they were thought to be Egyptians, and the name "gipsy" is a shortening of "Egyptian." Because they were accused of being thieves and practiced fortune-telling, every European country looked on them with disfavor and passed laws against them. In spite of their bad habits, however, the gipsies have always been a colorful and interesting people, and their vagrant way of life seems picturesque. Here we shall have a glimpse both of the real gipsies and of other wanderers who prefer to spend their lives on the open road rather than in houses.

WITH their brightly colored shawls and handkerchiefs, with their swarthy faces and the mystery that surrounds their movements, the gipsies appeal to the imagination of us all. They seem to be so free from all the cares and responsibilities of ordinary people.

It may be that our earliest thoughts of them were inspired by fear rather than attraction. We were, perhaps, told stories, for which there is happily no foundation, of their kidnaping little children and ill-treating them; but as we get older we look at them wistfully and think how nice it would be to live always in the open air and in the country, going where we pleased and when we pleased, and never having to worry about to-morrow, so long as the big stew-pot, hanging from three poles over the fire, had plenty of good things in it for to-day.

No one has done more to draw attention to the gipsies than a writer of the nineteenth century, George Borrow, who himself wandered about England in gipsy fashion for some years, making friends with them and learning their language and their ways. He described his adventures in two books called *Lavengro* and *The Romany Rye*.

The gipsy love of the open air and of the open road is beautifully summed up in a little conversation between Jasper Petulengro, or Smith, who is a real gipsy and the leader of his tribe, and Lavengro, who is only playing at being one.

Jasper says: "Life is very sweet, brother. Who would wish to die?"

And when Lavengro says that he would rather die than live in misery, Jasper tells him he talks like a fool.

"A Romany chal," he says, "would wish to live forever."

"In sickness, Jasper?"

"There's the sun and the stars, brother."

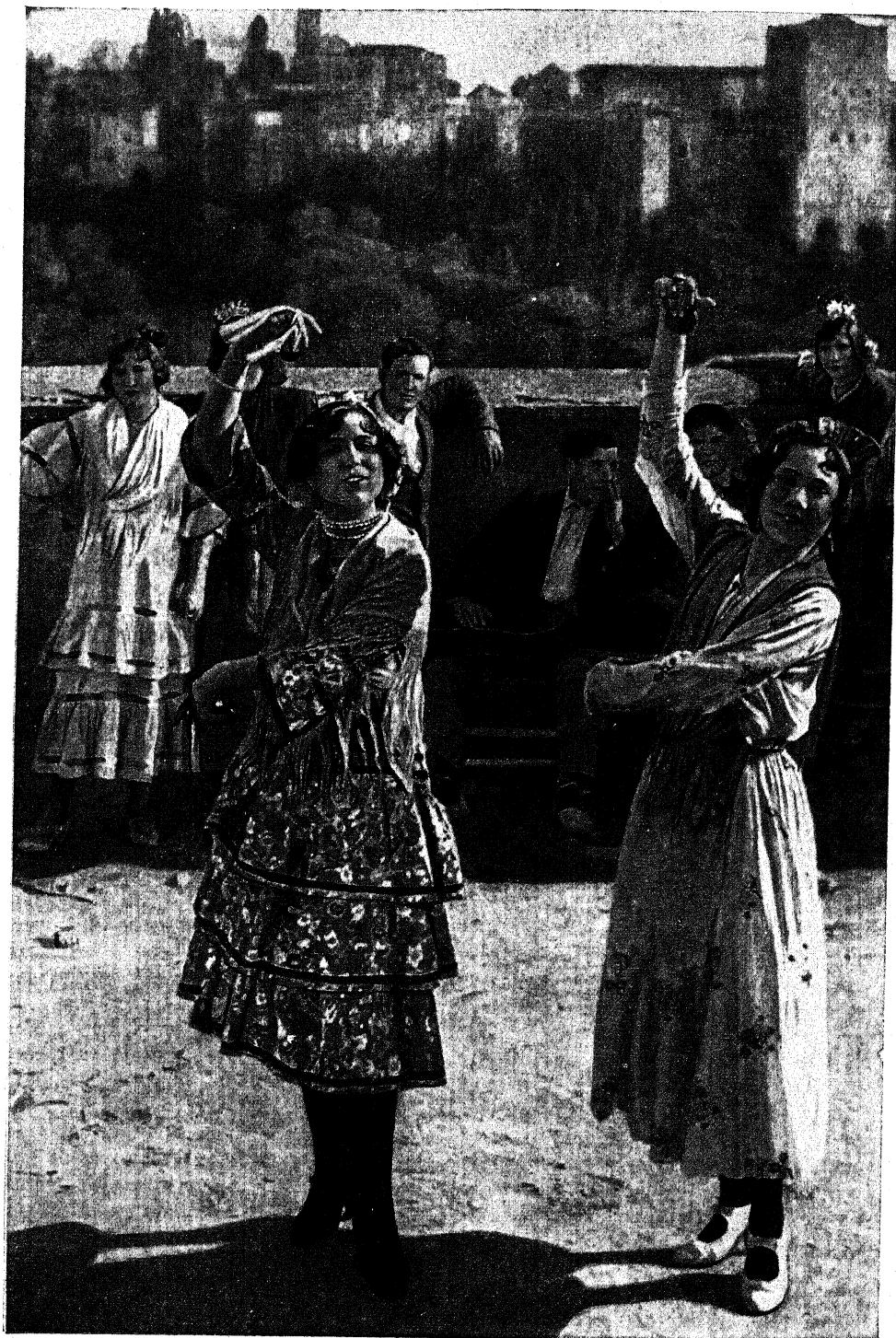
"In blindness, Jasper?"

"There's the wind on the heath, brother; if I could only feel that, I would gladly live forever."

It is this content with very simple things that makes the gipsy life outwardly so attractive and that makes the gipsies themselves such a care-free, happy-go-lucky race; but it is this same easy-going contentment which has kept the gipsy people in all parts of the world in a backward state.

From a careful study of their language it seems to be almost certain that they originally came from India. The name "gipsy" is a corruption of Egyptian and was given to them because at one time they were thought by the people of Europe to have come out of Egypt. This arose from the fact that they used to call their leaders Lord or Duke or Earl of "Little Egypt."

By the fourteenth century there were gipsies in Greece, but it was not until early in the fifteenth century that the first large band wandered farther into the countries of Western Europe. Sometimes the band became divided into two separate



© E. N. A.  
**CLACKING CASTANETS** accompany the dance of these supple gipsies of Granada, in Southern Spain. Ever ready to dance or play the guitar for a little money, they now live, some in houses and some in caves, in the Albaicin (or Albaycin) quarter, which was once an abode of Moorish nobles, but it is now very shabby.



HARDY

A GIPSY GIRL OF SPAIN is not so easily recognized as is a gipsy girl in another land, for she shares her most striking characteristics—her black hair and eyes and gleaming smile—with the women of her adopted country. She can be known, however, by the bright colors she wears, for the Spanish women are almost invariably clad in black.

## GIPSIES IN MANY LANDS

groups, led by chiefs known as Duke Andrew and Duke Michael. Not long afterward other bands followed them in considerable numbers.

As workers in metal, especially in iron, tin and brass, the wandering gipsies were often very useful to the settled inhabitants, for they made horseshoes and kettles and other articles of common use, as well as more elaborate productions.

It was in connection with their work as blacksmiths that a quaint superstition arose about their origin. A story is told that they were compelled to wander because a gipsy had made the nails for the Cross; but because he had afterward stolen one of the four nails, God had given his descendants permission to continue stealing whenever they had need. It is interesting to note that just about the time that gipsies first began to appear in Europe, pictures of the Crucifixion began to be painted showing only three nails.

The English gipsies always use the

word *Romany* in speaking of themselves; they never call themselves gipsies. In countries such as Hungary, they have the name of *tsigane* or *czigany* or, in its German form, *Zigeuner*. Spanish gipsies are called *gitanos*. According to some authorities, the *gitanos* of Andalusia are the classic example of gipsy life. They have lived much the same way for four hundred years, and are noted for flamenco—fiery songs and dances.

The strongest bond between the gipsies of all nations would seem to be their language. They have a great facility for picking up words and forms of speech in the countries through which they travel, but underneath all their variations of dialect there are perhaps about two thousand words for common things and ordinary actions, which can be traced back to Hindu sources and have been preserved more or less intact by gipsies almost everywhere.

The purest *Romany* of all is supposed to be spoken in the countries of south-



PHILIP GENDREAU

### A FUTURE IN THESE HANDS

Seated outside the caravan that is her home, a gipsy tells the fortunes of two girls in Ireland. Fortune telling had a religious origin, being a remnant of the ancient oracles of Greece and Rome.





PHILIP GENDREAU

#### MOST POPULAR MAN AT THE FAIR

Wild, sweet, sad melodies, played on a fiddle or on a resonant accordion by a gipsy musician, will attract a crowd at any county fair. All gipsies have a natural gift for music.

eastern Europe, especially in Hungary and Greece, while the English Romany is much less pure, probably because there are fewer gipsies, and because they have traveled less and so have had more time in which to adopt the speech of the people about them.

A gipsy man is a Romany chal, a gipsy woman a Romany chi. Everybody who is not of gipsy blood they call a Gorgio, and when talking to one another they say "Brother" or "Sister"—in their language "Pal" or "Pen." A "rye" means a "gentleman," and a "rawnie" or "rani" means a "lady."

The gipsy women have generally been cleverer than the gipsy men, and in every country where they have traveled their "dukking," or fortune-telling, has brought them at times into relationship with royalty. Britannia Lovell, a famous gipsy, told the fortune of George IV when

he was still prince regent, on Newmarket Heath, and is said to have received five pounds and a hearty kiss from him as her reward. Pepita, a Spanish gipsy, told the "buena ventura," or good fortune, of a Queen of Spain, and Modor, a gipsy of Moscow, did the same for an Empress of all the Russias.

Too often, however, the gipsy women did not confine themselves to fortune-telling, but played tricks of a more dishonest nature on the ladies who listened to their tales. One such deception was to persuade the lady that if she placed a sum of gold in the gipsy's hand and then made a parcel of it and hid it between her feather bed and her mattress, leaving it there for a year without looking at it, she would find at the end of that time that the sum had increased. Simple-minded people were ready to believe anything that the gipsies told them; but at



**THERE ARE MANY NOMADS** in the world who are not of gipsy blood, but most of them lead a wandering life of necessity, not through love of it. These Afghan herdsmen, for instance, rarely stay long in one place because only here and there upon the wild and desolate mountain slopes

EDWARDES

do they find the wherewithal to feed their flocks and herds. What little verdure they do find, such as the scrub grown among the stones, is soon exhausted; then the whole tribe must move on to another green patch. Herdsmen make up numbers of the earth's wanderers.



**A VARIED ORCHESTRA**, composed of a mandolin, a violin, a flute and several tambourines, accompanies this gipsy dance in a courtyard in southern Serbia. Of uncertain origin, these wandering peoples may be found on every continent, though they seem to prefer the neighbor-

hood of the Balkan Peninsula. The first name by which they appear in history was *atzigan* or *atzingan* (corrupted to *tsigane* and *czigany*). Certain of their own numbers call themselves Roms (Romanies); but every country has its own term for these spirited, independent wanderers.

© LAYON

## GIPSIES IN MANY LANDS

the end of the year, when the gipsies had wandered far away, on opening the parcel they would find that the bag of gold coins had been cleverly changed for one exactly like it, but which contained only a few halfpence and farthings.

Among the English gipsies there are certain family names such as Lee, Hearne, Lovell, Boswell, Smith, Cooper, Stanley, Marshall, Grey and Buckland, which are met with again and again. It is probable that in many cases gipsy families adopted these names from the great men on whose lands they had been allowed to camp, though two of them—Smith and Cooper—represent trades which they were wont to follow.

They have a wonderful assortment of Christian, or first names. The writer was once at a gipsy christening in Norfolk, where the baby was named Magenta. Perphenia, Tryphenia, Syeira, Shuri, Mera-

lini, Reyna, Fenella and Orlenda are a few typical names of gipsy girls; the boys' names are less unusual, though Plato and Pyramus are not uncommon.

The gipsies cannot be said to have any special religion of their own. When they first started on their wanderings they probably professed some form of Hinduism. The word which they use for the Christian Cross is the same word which means in India the trident of the Hindu god Siva; but they long ago lost whatever faith they ever had. In Mohammedan countries they profess to be Mohammedans, and in Christian countries they belong to that faith. They like having their babies christened; in fact, they sometimes manage to have them christened several times in the different places in which they stay, for they regard baptism as some kind of potent charm.

For the most part, gipsies are handsome

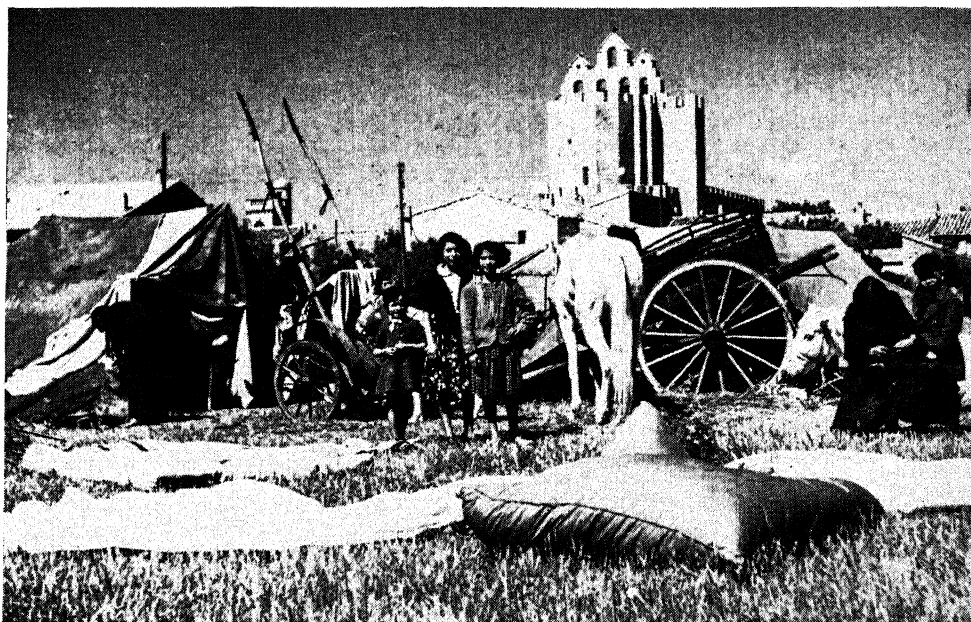


FREDERIC LEWIS

### GIPSIES ROAM THROUGH THE TRAILS HIGH IN THE PYRENEES

A group of the incurable nomads pauses beside a little-used road in Andorra to repair a broken chair. Andorra is a small, self-governing state in the Pyrenees Mountains between France and Spain. It covers less than two hundred square miles, and its winters are long and severely cold, but the Gipsies invade its byways in spite of the lonely, mountainous terrain.





BLACK STAR

#### GIPSY PILGRIMS ENCAMPED NEAR SAINTES MARIES DE LA MER

Each year, in the springtime, gypsies from all over Europe make a pilgrimage to Saintes Maries de la Mer. In the little French Mediterranean town they honor their patron saint Sarah.

folk, with dark eyes and complexions, teeth of dazzling whiteness, lithe sinewy bodies and rather small hands and feet.

Some of them travel about in caravans, the equipment of which always includes a stove, with a chimney going through the roof; but the natural dwelling of a gypsy is a tent, oblong in shape and very simply made. Two rows of long rods are stuck into the ground opposite each other. The tops are bent over till they meet, are tied together, and then coarse brown cloths are thrown over the whole, skewered together at the top and pegged down at the bottom. Today we find many gypsies traveling in motors rather than in horse-drawn vehicles.

There used to be several open spaces in London where gypsies congregated with their caravans and tents in wintertime, when the woods and commons of the country had grown damp and cold; but, both in town and country, the life lost much of its attraction, for besides war, policemen, educational authorities and all kinds of inspectors have made the gypsy mode of living in the British Isles less free and easy than it once was.

On the continent of Europe there are believed to be about three-quarters of a million gypsies, the largest proportion being in Rumania, Hungary and Bulgaria; and there are immense numbers in Armenia, Persia, Syria and other Asiatic countries, as well as in Egypt, Algeria and other parts of Africa.

There have been considerable migrations of gypsies to the Western Hemisphere. In America they are to be found from Canada to Brazil, but most of all in the United States, and there are scattered bands of them even in Australia and New Zealand. The wider spaces of these countries offer the gypsy folk less scope for practicing deceptions on their fellow-creatures, but they are far more suitable for the genuine gypsy life of free, unfettered wandering and camping under the open sky than are the crowded lands of Europe.

In the countries of central and southeastern Europe the gypsies are famous for their music, which is wild and wonderfully effective. Their principal instrument is the violin, and the great composer Liszt called them the founders of the style of

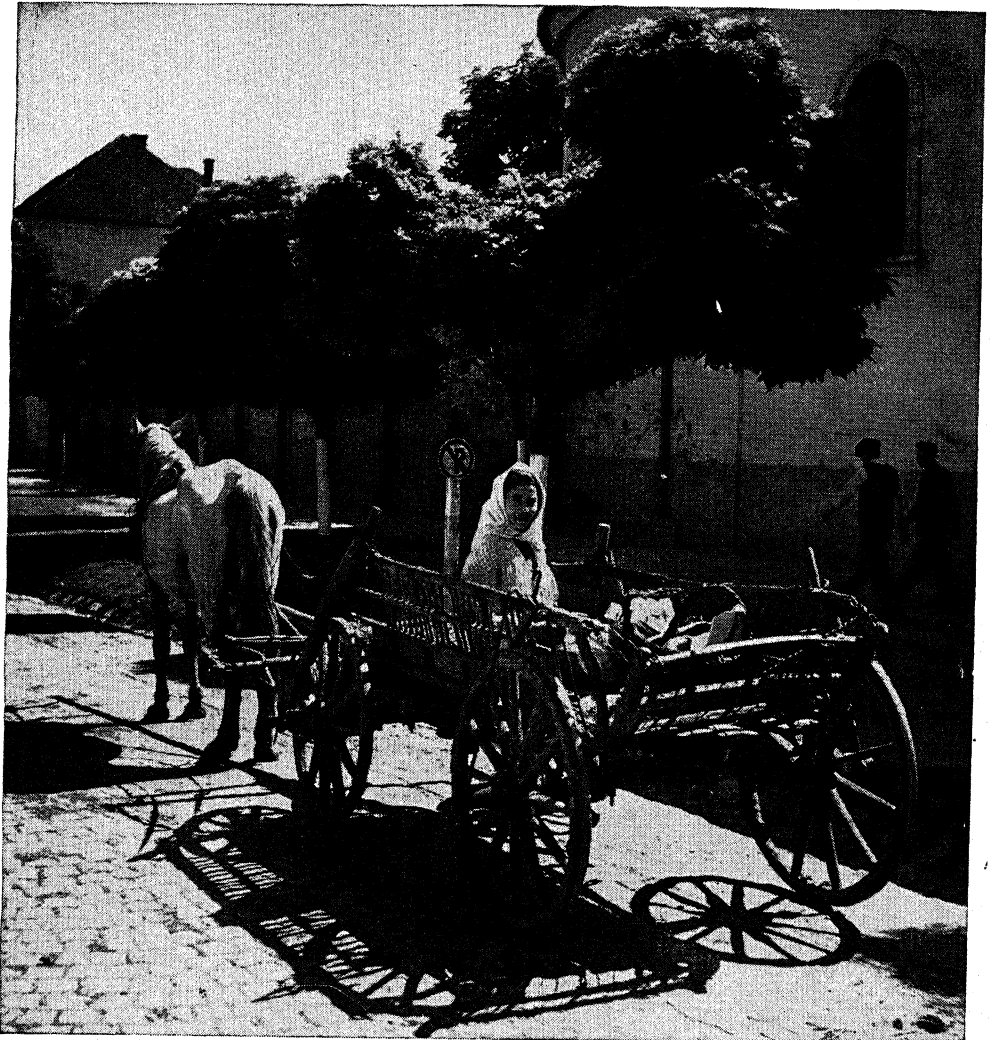


## GIPSIES IN MANY LANDS

music for which his native Hungary is famous. Gipsies play exclusively by ear, but with a remarkable technical accuracy. In Wales, where there are many of them, they often exchange the violin for the harp.

In the course of their wanderings the gipsies have suffered from terrible persecutions, which were partly brought upon them by their own misdoings. It often happened that when they first ap-

peared in a new land they were treated kindly and were respected for their undoubted talents and for their knowledge of far distant countries, but they soon got a bad reputation. The thefts and robberies that were always associated with their stay in any place brought on them the wrath of the authorities, and they came to be accused of worse crimes—child-stealing and even cannibalism—of which they were guiltless.



BLACK STAR

### A GIPSY GIRL TRUNDLES THROUGH A YUGOSLAVIAN VILLAGE

The wagon is about ready to fall apart and the horse is a nag. But to the girl and her family these things matter little. There are blue skies overhead and the open road beckons.

# FAR FROM THE IRON ROADS

## *How People Travel in Out-of-the-way Lands*

When looking out of the window of a fast-moving modern bus or speeding express train, we may often wonder how people travel in those parts of the world where there are no bus lines and railroads. We are used to taking a journey of a hundred miles in a bus or a train, and it seems nothing to us. In some far-away lands, however, such a trip might mean several days of preparation followed by much discomfort and fatigue during the travel over mountain paths, desert or jungle trails. In this chapter we shall read of the strange animals, queer vehicles and methods of human back-packing used where no trains or busses run or where there are no airplanes to carry passengers or cargo.

**T**ODAY a transport plane can fly across the continent of Australia from south to north in a few hours. Yet until a relatively few years ago, before the development of the railroad, it would have taken a month to bring gold down to the coast from the Kalgoorlie gold fields in Western Australia. In the past hardy pack camels were often used to do the heavy work of transporting the gold in this region.

Camels are still the chief carriers over a very considerable portion of the earth's surface. All over North Africa, Arabia, Persia and Turkestan and through the desert of Gobi as far as the border of the Chinese Empire these long-legged, queer-tempered but wonderfully enduring creatures carry men and merchandise exactly as they did thousands of years ago.

Afghanistan is a country with few roads and no railways, and people usually travel on horses or camels. The wealthy Afghans and ladies of high degree use a kind of horse-litter, which is said to be most comfortable. It consists of a hammock slung under an awning and is fixed upon poles, the ends of which are attached to pack-saddles worn by a pair of horses.

The sedan chair in which English ladies of the eighteenth century went to balls was carried by two men. A similar chair survives in the palanquin of the East. It is a box of bamboo slung upon two poles. Inside is a chair provided with an awning to keep off the sun. The poles are so springy that there is little or no jolting as the passenger is carried along by two or four strapping coolies. Palanquins are used in Madagascar.

In many parts of the East men still take the place of transport animals. In spite of railways and motor cars, the jinricksha is still popular in Japan. It is a light vehicle fitted with a hood and built rather like an American phaeton. The wheels are large but light. The 'ricksha man wears a big straw hat which looks like a basin turned upside down, and an odd straw cloak. As he is accustomed to the work from boyhood, he thinks nothing of a twenty-mile journey, and on the level he travels at a good pace.

The bullock-cart is known in many parts of the world, and is usually a very rough and primitive vehicle drawn at a pace that rarely exceeds two miles an hour; but in India there may be seen well sprung bullock-carts provided with awnings and drawn by little trotting bullocks. The heavy bullock-cart is still used in northern Spain and Portugal, where it has wheels made of solid disks of timber fixed upon wooden axles. In Portugal the axles are left ungreaed, that their noise may frighten away evil spirits. Here at vintage time the grapes are emptied into great vats on wheels which are drawn to the wine presses by stolid oxen.

Many parts of the world are so mountainous that it is impossible to build railways or even roads. Everything that needs to be transported in those districts must be carried by pack-animals or else by porters. The mule is the most common pack-animal because it is sure-footed and hardy, but in the Himalayan Mountains yaks are sometimes seen, and among the Andes llamas may be used. Human



EWING GALLOWAY

#### A TYPICAL WAY TO TRAVEL IN JAVA

This Javanese cart, made of bamboo, gives its occupants a rough, though leisurely, ride on two hard wheels. Heavy wooden yokes fit around the necks of the placid oxen, which pull the cart slowly along the unpaved country roads. The long pole on the yoke is covered with brightly painted designs that are supposed to frighten away any evil spirits that may be near.

porters are also commonly employed in many parts of Africa; they are, indeed, the only means of transport in many districts there, because the heat is too great for any pack-animal, there are no roads for vehicles and the rivers are too overgrown with reeds and too shallow or rapid to be navigable.

The mountaineering clubs of the Western United States and Canada often employ pack-mules as far as there are trails for them, then take to back-packs in the manner of Swiss Alpine climbers.

In the frozen far north of Europe within the Arctic Circle, and all across Arctic Siberia, reindeer are the only draught animals, and they draw loaded sleds with great rapidity over the frozen ground. In other Arctic lands, however—Alaska, north Canada and Greenland—teams of half-wild dogs, called huskies, are employed to draw the sledges over the ice and snow.

To see dogs at their best in harness, it is necessary to visit Alaska and the great Northwest of Canada, and to watch a

team of true huskies drawing a sledge at full gallop along the frozen surface of some great river, say, the Yukon. They race along at ten or twelve miles an hour and will keep up this pace for distances of fifty or sixty miles. Although experiments have been made with ponies and reindeer, it has been found that no other animal can compete with the dog in the drawing of a sledge across snow and ice during an Arctic winter.

In the first place, a dog can endure intense cold far better than a horse, and secondly, he is appreciably more easily fed, since a small daily portion of dried fish keeps him in good condition. A third advantage possessed by a dog is his comparatively light weight, which enables him to travel on top of a snow crust through which any larger or heavier animal would break and sink. All trappers in these regions, as well as prospectors and mail-carriers, use dog teams, and high prices are paid for good husky dogs. A thousand dollars is not an unusual sum to give for a good team.



PAN AMERICAN WORLD AIRWAYS

#### A MATTER OF ORGANIZATION

Shank's mare is the common mode of transportation along the byways of Guatemala. These Indians think nothing of carrying heavy loads for hours. They have learned how to pack their merchandise in cradles that balance perfectly on their shoulders. Shawls thickly folded protect against rubbing; and a tall, pointed walking stick helps in ticking off the miles.



SOV FOTO

### ANTLERED STEEDS FOR THE HUNTERS OF THE ASIATIC TAIGA

The reindeer have evidently been well trained to bear human riders. A region of swampy, ever-green forests, the taiga is in the central part of the Russian territory once called Siberia.

A husky dog is the hero of Jack London's *Call of the Wild*. The average sledge dog is no doubt but half domesticated. Yet these animals will often show the deepest devotion to their masters. Some members of the Northwest Mounted Police went on a surveying expedition for the government, but when they reached their camp it was found the provision box had fallen off the sledge and one of them went back with his dogs to pick it up. A terrible blizzard blew up, and when, three days later, a search party went out, they found the man lying dead in the snow with the leader of his dog team lying on his master's body, frozen stiff.

In Russia, also, sledges are frequently the only possible means of conveyance, but here the cold is not so intense as within the Arctic Circle, and so horses are employed to draw them. Horses, of course, are used all over the world where it is not tropically hot nor freezingly cold. Over the great grasslands of South America, for instance, where railways are as yet very inadequate, practically everyone rides a horse—even children going long distances to school.

Some years ago, in the desert country of Arizona, two brothers who worked a small gold mine used a "wind wagon" of their own construction—a wagon with a sail. It hauled ore to the nearest shipping point and brought in their supplies. As the sand was smooth and firm, the odd wind-driven vehicle could travel at the rate of ten to fifteen miles an hour.

In many countries, especially those covered with tropical forests, the waterways are the only means of communication. In the huge basin of the River Amazon there are practically no railways serving an area of 2,722,000 square miles. There are few Indian trails through the almost interminable forests, and it is practically impossible to drive roads or railways through the dense jungle. The only means of communication is along the waterways, but it is as easy for a traveler to lose his way in this labyrinth of channels as it is in a desert.

It is the airplane that is making possible much of the surveying of the muskeg and lake region of northern Canada, where lies an all but unexplored region of bush and swamp. Air pilots now carry mail and freight, even machinery, across the wastes.

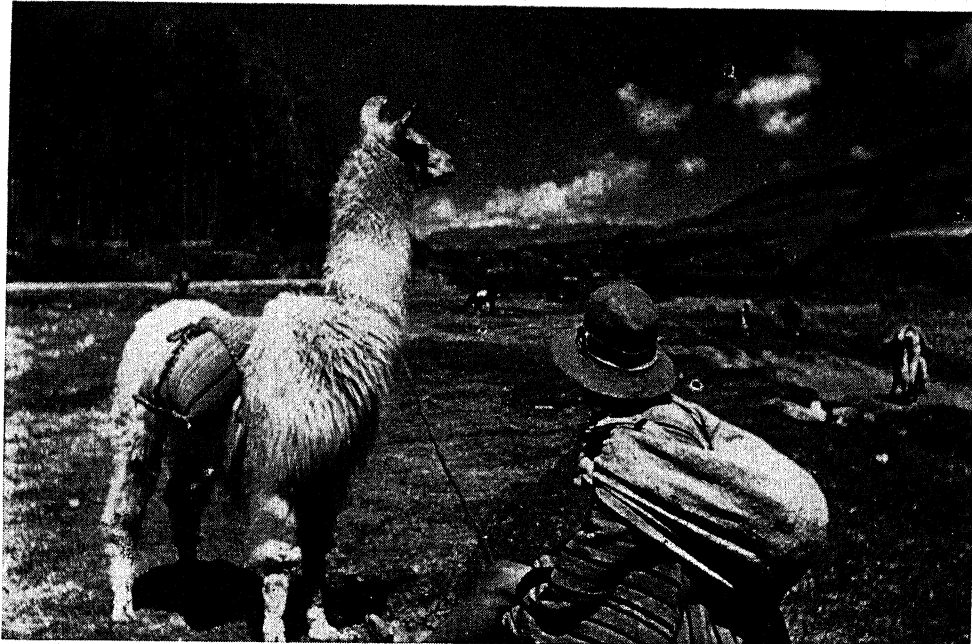




NATIONAL FILM BOARD

#### TO WORK AND BACK BY 'COPTER

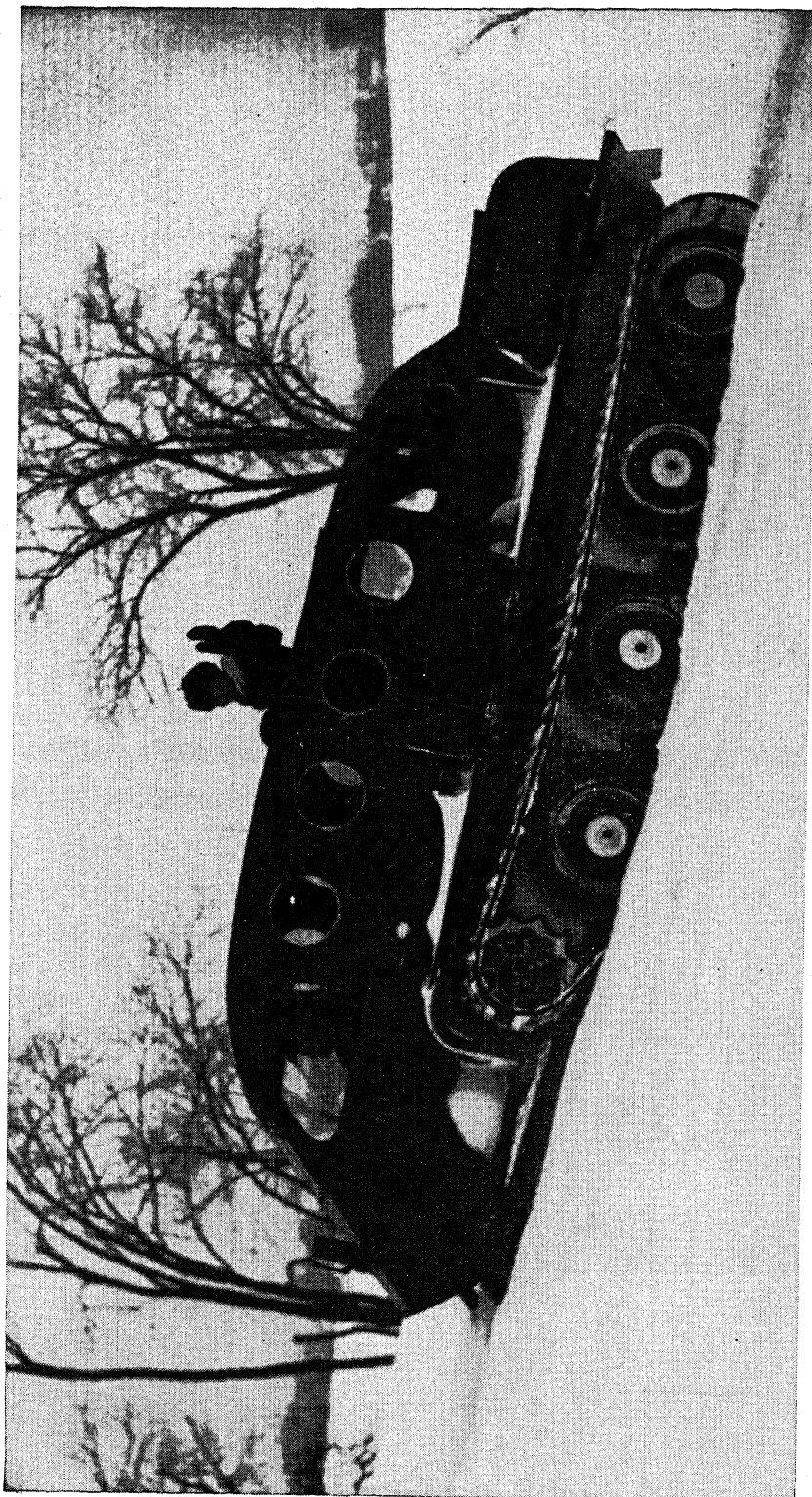
The helicopter can go where other aircraft dare not venture, for it can mount and descend vertically. The picture shows surveyors returning to camp after a day in the wilderness.



GRACE LINE

#### BURDEN BEARER OF THE INCAS

The scornful-looking llama of the Peruvian highlands carried burdens for the Incas before the days of Pizarro, and it still serves the Indians of the mountainous country.



NATIONAL FILM BOARD

IN CANADA, WHERE THERE IS TOO MUCH SNOW TO BE runners in the front instead of wheels and is propelled over the ice and snow by means of caterpillar treads. It is completely enclosed to protect the driver and occupants against biting winds and driving snows. This is a tremendous advance over the dog-team sleds.

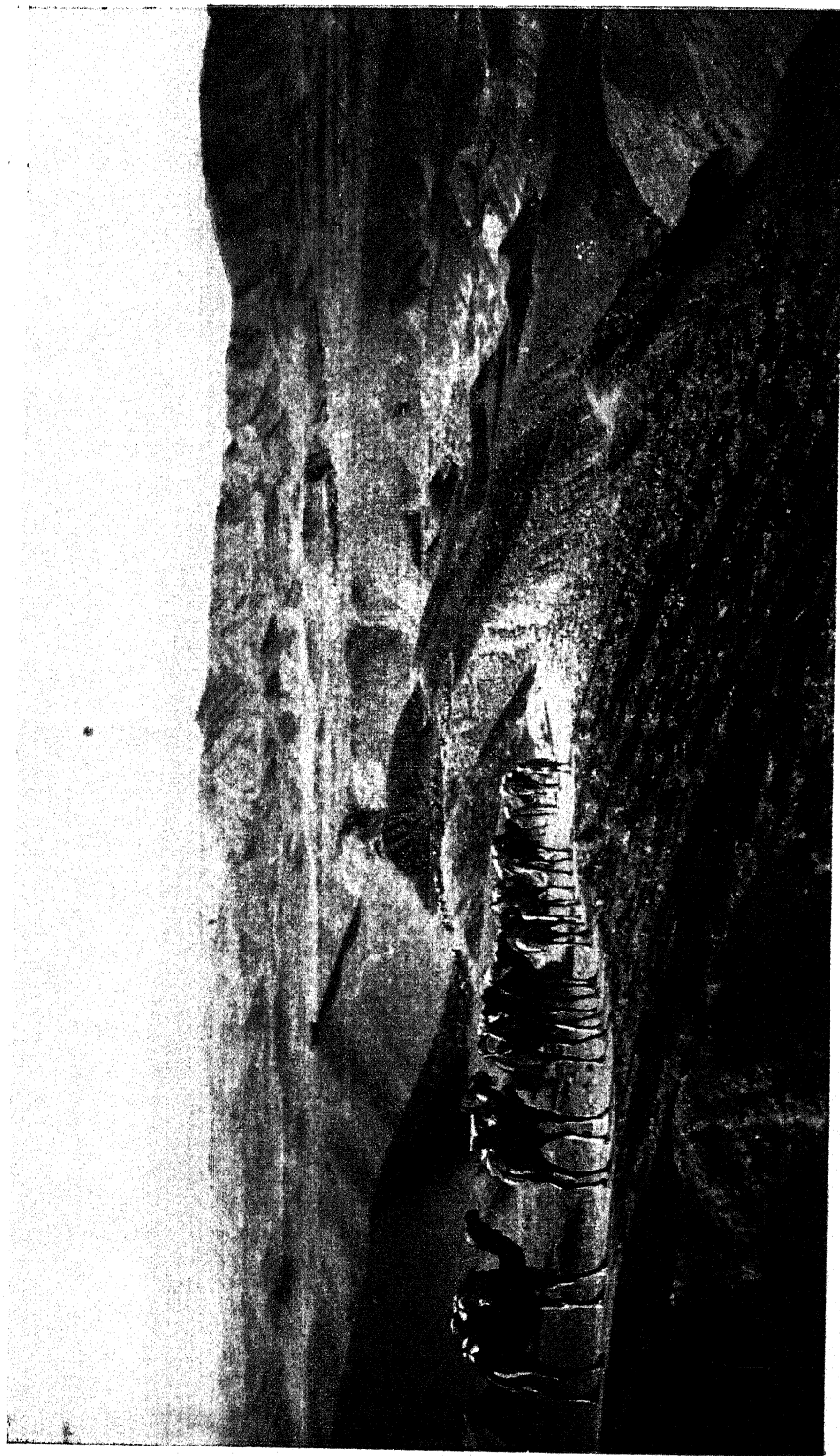
Canada is a vast country that extends far into the north, past the limits of the Arctic Circle. In regions where the climate is extreme and trails lie buried in snow most of the year or do not exist at all, the snowmobile provides a practical means of rapid and efficient transport. It has smooth



# ALASKA FUR TRAPPER WITH DOG-TEAM AND SLEDGE TRAVERSING THE SNOWY WASTES

Ewing Galloway

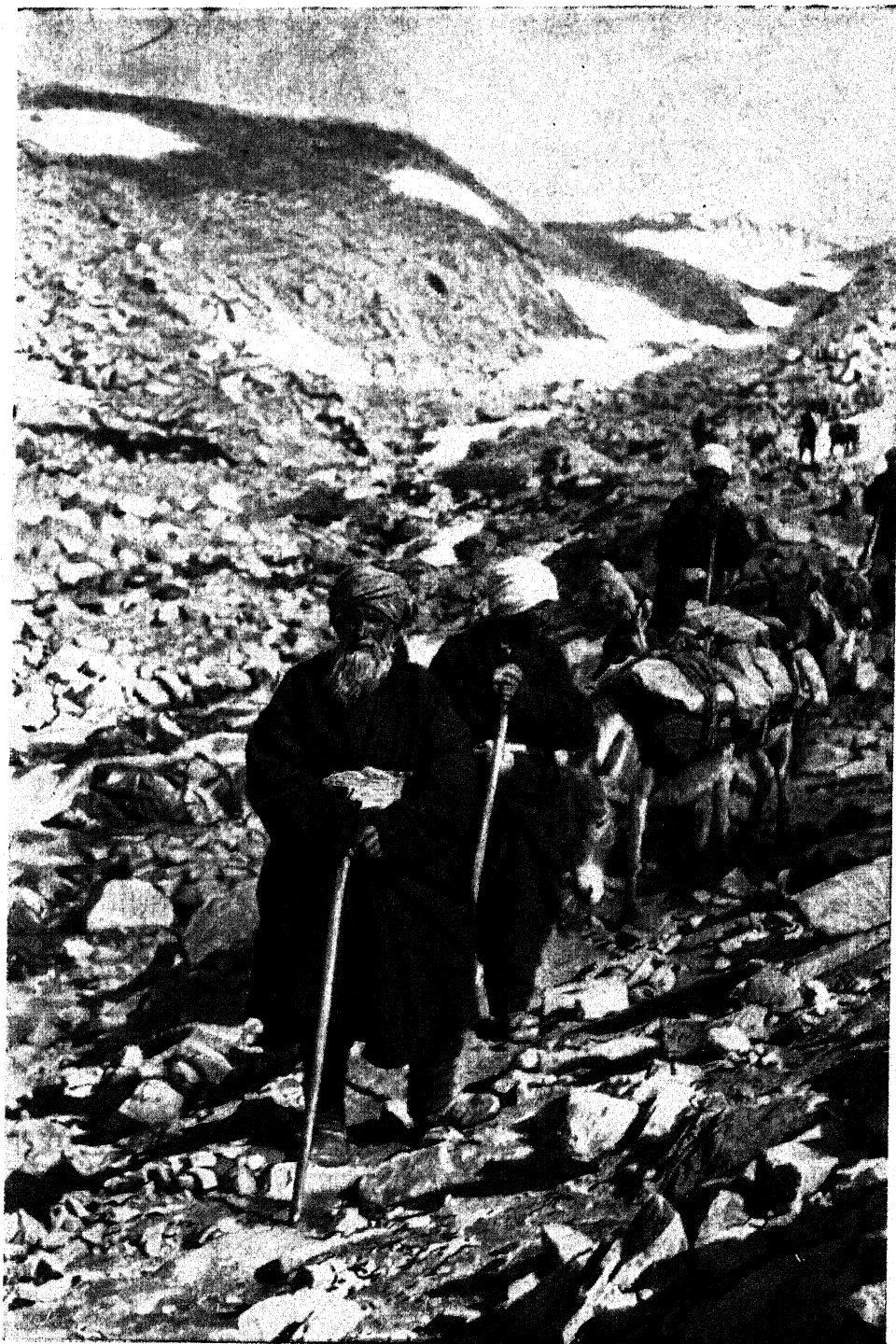
Alaska has an area of close to six hundred thousand square miles, yet there are only about nine hundred miles of railroads, as contrasted with between seven and eight thousand miles of mountain trails. But there are sixteen hundred miles of sledge roads over which "husky" dogs and animals draw platforms on wheels. malamutes, both part wolf, drag mail, supplies, furs, game and travelers unable to make it on snow-shoes. There is even a dog car railroad along which, on narrow-gauge tracks originally built for a steam-engine, these



**ACROSS THE SANDY WASTES** that lie between the Indus River and the foothills of the Sulaiman Range in southern West Punjab, in northern Pakistan, plods a long caravan of camels. It is on the road to Afghanistan, which it will reach by way of the Gomal Pass. This is a route of the Afghan

merchants who every autumn leave their country to carry products brought to Afghanistan from Bokhara and Samarkand, in Russian Central Asia, to the rich markets of India. Travelers must keep close to the road for the road once lost would be hard to find.





EDWARDES

AFGHANISTAN ASSES laden with salt, pick their way along a rocky track often swept by sudden blizzards. Caravans travel over the high mountain passes. Quantities of goods are conveyed by animals in Afghanistan but these are rapidly being superseded by motor transport. There are neither railways nor navigable rivers but a basic highway system exists.





EWING GALLOWAY

#### CHUNCHO INDIANS OF PERU POLING RAFTS OF BALSA LOGS

The Chunchos still use a primitive craft. A narrow, crude raft made of balsa wood, it is extremely light in weight. The Chunchos are an uncivilized tribe, living deep in the forest.

# THE STRENGTH OF RUNNING WATER

## *How Rivers, Great and Small, Shape the Land*

Running water is one of the strongest forces in nature, for "constant dropping wears away a stone." Deep gorges, fertile plains, lakes and rapids are made by rivers. They break up huge rocks and turn them into silt; they reclaim land from the sea by building deltas and islands at their mouths—or they destroy life and property by flooding. They provide natural highways for man and beast, make port cities possible and suggest tribal boundaries which are often retained after centuries of civilization. Until the earth's surface is level their work will remain unfinished. Our pictures show the achievements of various waterways.

**R**IVERS are Nature's architects. At the end of the Ice Age, when the seas were drawing back toward the Poles and the glaciers to their fastnesses on the peaks, our present rivers came into being. Many of them, in their novitiate as land-carvers, guided by the deepest hollows of the hillsides and seeking the lowest level, ran into one another until their combined forces became fierce torturers. In the course of centuries they carved ever deeper entrenchments.

It might happen that some river, by cutting farther and farther into the mountain that divided its headstreams from those of another river, would at last break away that barrier every here and there. If now it had succeeded in carving a deeper valley than its neighbor, it would turn robber and despoil the second stream. This is the explanation of many a dry river-bed.

Sometimes a river flows through a plain encircled by high hills. Even that plain is the work of the river, for the stream came down from the mountains and formed a lake, this lake grew larger and deeper, possibly centuries passed, but always the river awaited its opportunity to escape. At last the water rose to such a level that it found an outlet over the lowest point of its imprisoning walls. Slowly the stream wore down the barrier, and at the same time the lake decreased in depth—until at last the bed of the river was on the same level as the bed of the lake. Then the lake drained away and its bed became a plain. That has been, and no doubt will be, the fate of most lakes.

As it is the aim of all rivers to reach the sea, they must either remove obstacles that block their path or go around them. When they are rapid torrents rushing down mountainsides, they usually take the first course; when, nearer the sea, the slope of the river-bed lessens, they must resort to the latter. Thus we find that in a river's lower course it twists and zigzags.

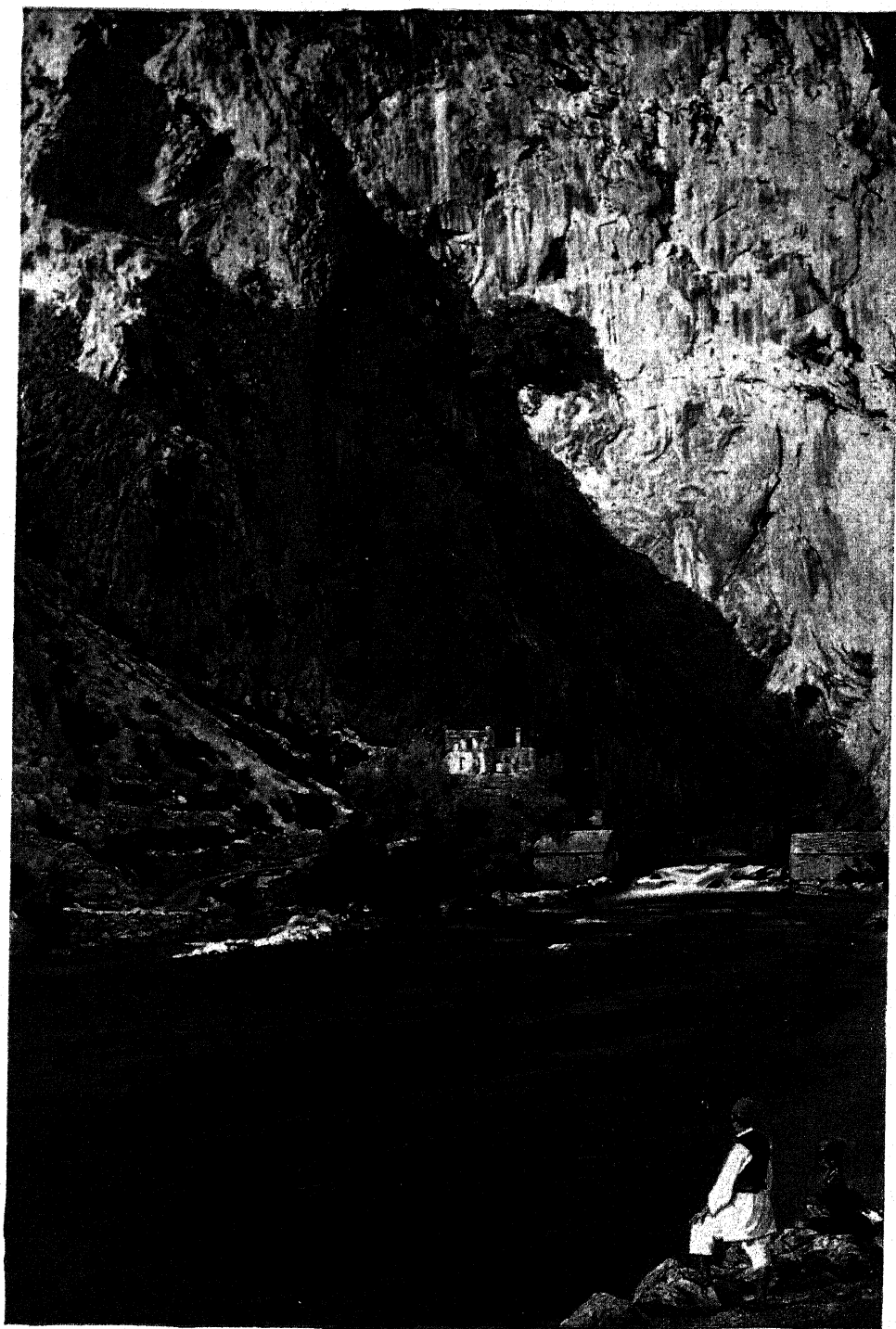
When the river is rapid it carries with it all the rock and stone that has been ground to a fine powder. When it becomes more sluggish, it has not the strength to do so, and, dropping the silt, fills up its bed, becomes shallower, forms islands, divides into many channels, and at its mouth, makes what is known as a delta. That is how many rich coastal plains have been formed. Let us take as an example the Mississippi River. It is filling up its bed to such an extent that near its mouth it is actually at a higher level than the surrounding country. Were it not for the artificial banks that clever engineers have built, it would flood even more disastrously than it has done. The one best insurance against destructive floods and consequent dearth of water is of course the presence on mountain slopes of a forest cover. In the case of the Mississippi, various artificial means to flood prevention and control are being tried. Some floods, however, are beneficial. We have only to consider the Nile to realize how great is the value of seasonal floods; for its regular inundations deposit fertile mud on the arid agricultural lands. Other great rivers subject



**THE GORGE OF GONDO**, through which runs the Divedro River, is an example of the carving power of swift mountain streams. Not only has this river cut a valley a thousand feet deep, but one of its head streams, in opposition to several other streams flowing northward, has been in-

strumental in forming the famous Simplon Pass, 6,502 feet high. Thus with the aid of several streams, surprisingly small for the work they have done, man has been able to build roads over the Alps along which traffic may pass between Switzerland and neighboring countries.

© UCHTER-KNOX



© E. N. A

**BENEATH THIS PRECIPICE** is a cavern, from out the mouth of which flows a river, the Buna, which has made its way underground, and which after a short course, falls into the River Narenta below Mostar. These sun-bathed cliffs and cool, clear waters are to be seen near Blagaj, a little Mohammedan village in Herzegovina.

## THE STRENGTH OF RUNNING WATER

to periodical floods are the Euphrates, the Ganges, the Indus and the Yangtze Kiang.

If the hills are close to the sea, the rivers are short and rapid; if they are far from the sea, the rivers are long and sluggish, for the speed of the current varies in proportion to the steepness of the ground. When it encounters a sudden slope in its bed, an outcropping of hard rocks or a narrow defile, then rapids occur. But when the river encounters a mass of hard stone, the rock beneath which is comparatively soft, it carves its way beneath the barrier. If the rock over which the river flows in its early course is limestone, the river will carve a deep channel between precipitous walls.

### *How Rivers Avoid Obstacles*

Rivers invariably twist around hard obstacles. If we draw a straight line from the source of the Rhine to its mouth, we shall find the distance to be about 360 miles. Yet the Rhine has a winding course of 600 miles. Three great rivers—the Yangtze Kiang, the Mekong and the Salween—rise not far from each other in the lofty tableland of Tibet. They once flowed for much of their course over a plateau nearly twenty thousand feet high, but so deep are the trenches they and other streams have dug for themselves that they have turned the plateau into a country of enormous mountain ranges and forbidding gorges. These three rivers flow parallel for a distance of 170 miles, for about 130 miles of which they lie in a belt only 50 miles broad; yet they never touch, and their mouths, one in the Yellow Sea, one in the South China Sea and one in the Indian Ocean, are thousands of miles apart.

On the character of the rivers largely depends the situation of towns. Rivers that are long and sluggish are generally navigable and are often so deep near the sea that they provide anchorage for large ships. We have only to consider what the Thames has done for London. The Thames is an insignificant stream in comparison with the Danube or the Volga, yet it was the Thames that attracted the

commercial instincts of the Romans and caused them to build their city of Londinium on its banks; and it is to the docks, warehouses and factories which its presence makes possible that the Port of London owes its position to-day.

### *Highways of Migration*

As highways, rivers have always been of great importance. The Mississippi was the main road through the southern states of North America, from Minnesota to the Gulf, until the coming of the railway. The River Amazon affords practically the only highway through the dense forests of northwestern Brazil. It is indeed largely owing to the unceasing toil of innumerable streams, which are often nothing but insignificant trickles of water, that man finds passes across the mountains over which he can build roads and railways. Rivers are highways for plants and animals as well as men. With them they bear the seeds of the plants that grow beside their banks, to deposit them many miles away; and on natural rafts—torn from the bank during a flood perhaps—they carry land animals, who are thus led upon involuntary migrations.

### *Work of the Colorado*

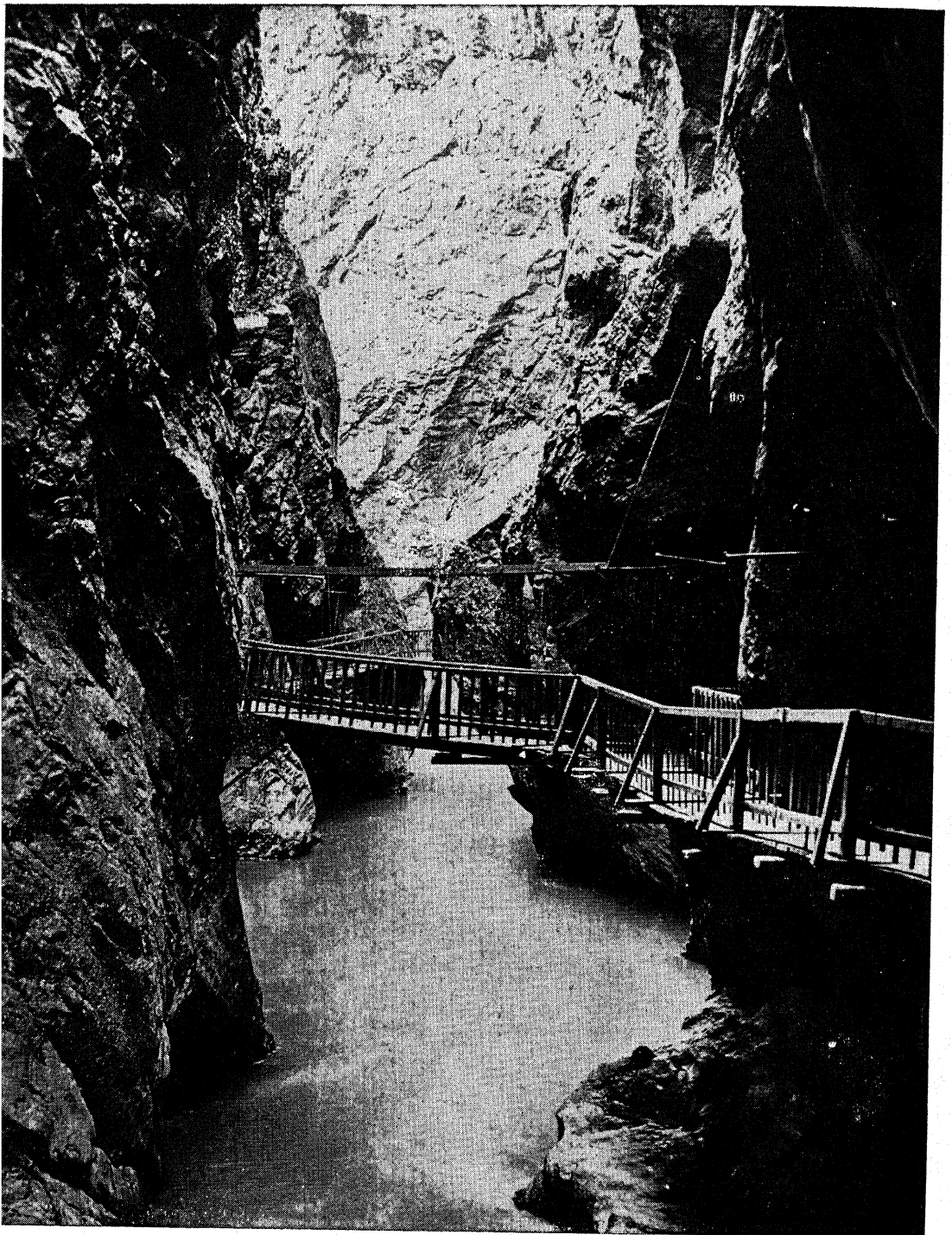
Perhaps no river has altered its bed more amazingly than the Colorado River. This two-thousand-mile stream, from the foot of the mountains among which it rises to its mouth in the Gulf of California, has a fall of about six thousand feet. Into it pours the water of a drainage area over four times as large as England and Wales put together, while it receives the water of seventeen rivers. For many miles this river and its tributaries flow through deep gorges—over a mile deep in some places, and from half a mile to fifteen miles wide. At flood times the water sometimes rushes along at twenty-five miles an hour. This extraordinary river is not yet satisfied with what it has accomplished, for it is still digging, and its canyon will be yet deeper before its work is finished. That will not be until it can flow at a uniform pace down an even gradient to the sea.





© E. N. A.

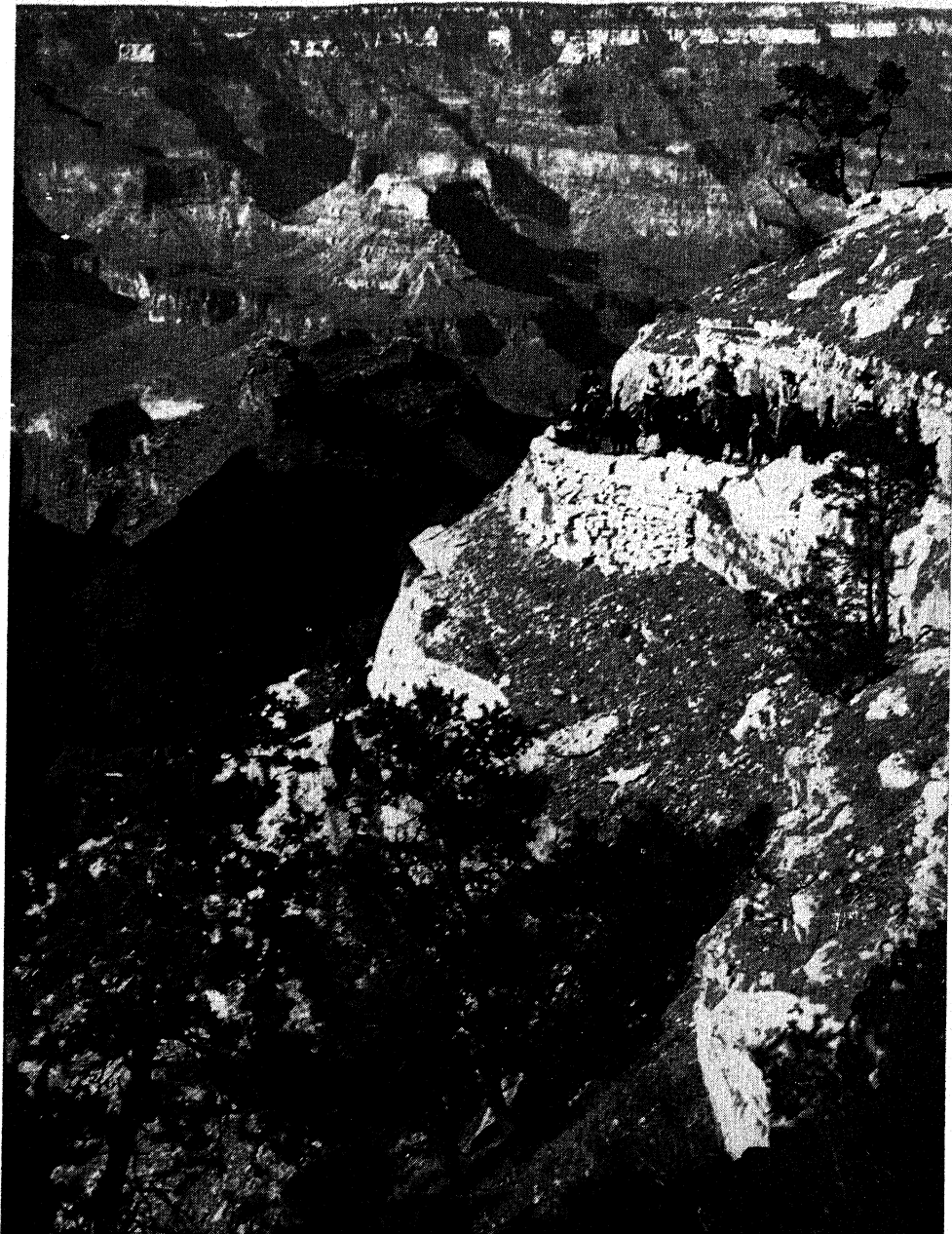
**RIVERS OF ICE**, vast glaciers moving imperceptibly for thousands of years during the Ice Age, scraped the sides of the Alpine valleys and deepened them by plucking and scouring material from their floors. In this way most of the valleys in the Alps acquired their characteristic shape. Many lake basins have been formed on the valley floors.



O. DARBELLA

#### ANOTHER STRIKING EXAMPLE OF A RIVER'S SKILL AS A SCULPTOR

To help visitors enjoy the austere beauty of the Gorges du Triente at Vernayez, in the Rhone Valley of Switzerland, a railed walk, deep in the canyon, follows the river's winding course.



EWING GALLOWAY

### GRAND CANYON OF THE COLORADO—THE MASTERPIECE OF A RIVER

This gorgeously colored canyon in the western United States is 217 miles long and more than a mile deep in parts. It is considered the most amazing example in the world of river erosion.



© E. N. A.  
which a stream has its beginning, the greater the distance it must fall; therefore the greater its swiftness and power. The Drac rises in the snowy Dauphine Alps—that is the secret of its strength—where once there was probably an enormous tongue of glacial ice.

**THE RIVER DRAC**, which is responsible for this great gash in the surface of France, is not a mighty stream; it is only a tributary of the Isère seventy miles in length. The aim of all rivers is to reach sea level, and their carving of gorges is to that end. The greater the altitude at

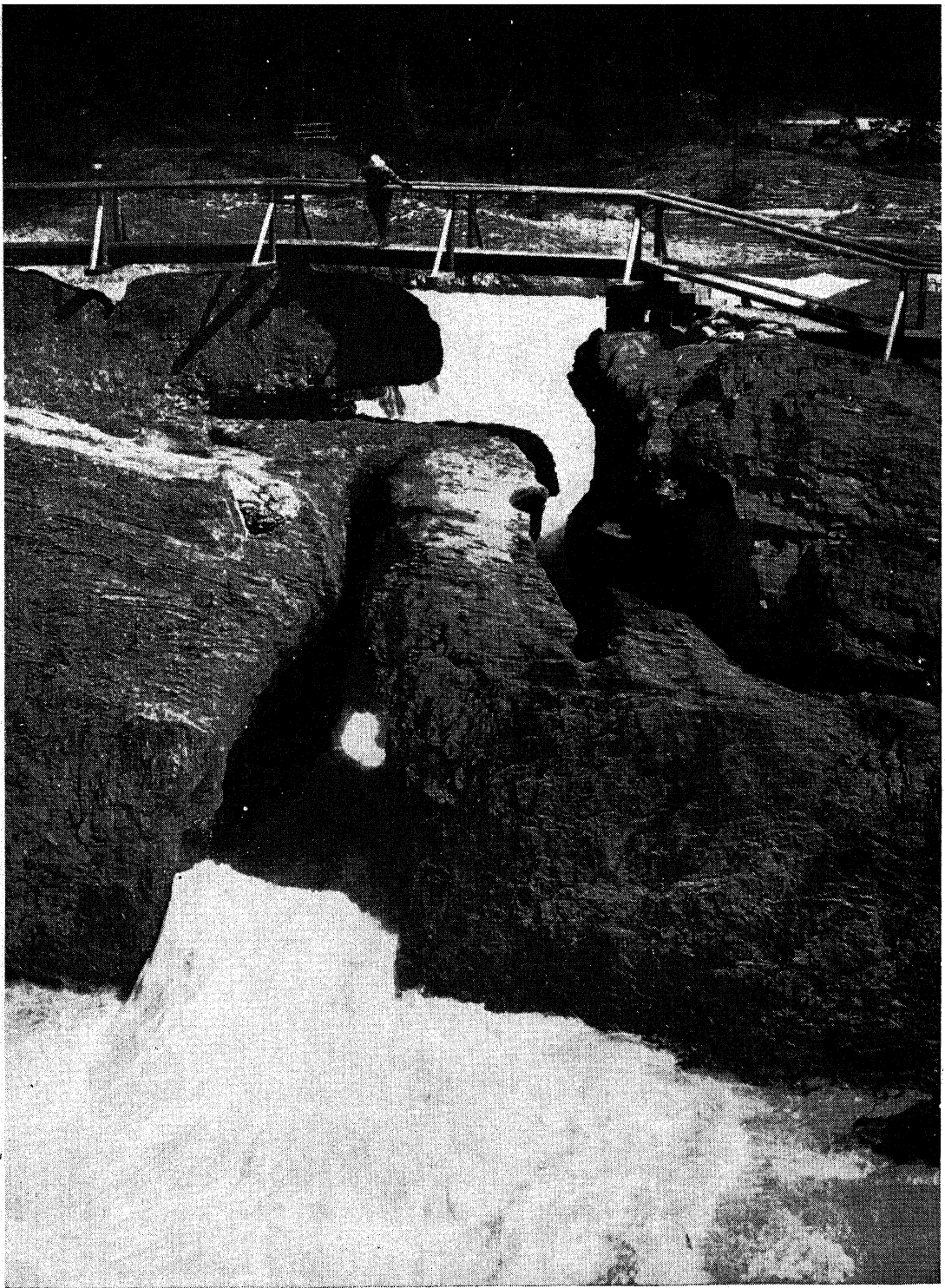


**THE POWER OF THE TARN** is well illustrated in this amazing gorge, between La Malene and Le Rozier, of the Defile des Etroits, sixteen hundred feet deep. This French river and several others rising in the Cevennes once flowed across a wide plateau and fell in cascades over

its edge. The ground was limestone and gradually they cut channels for themselves, so that the once flat tableland is now divided into many smaller ones separated from each other by deep and fertile valleys. The porous tablelands, however, are quite barren.

© E. H. A.





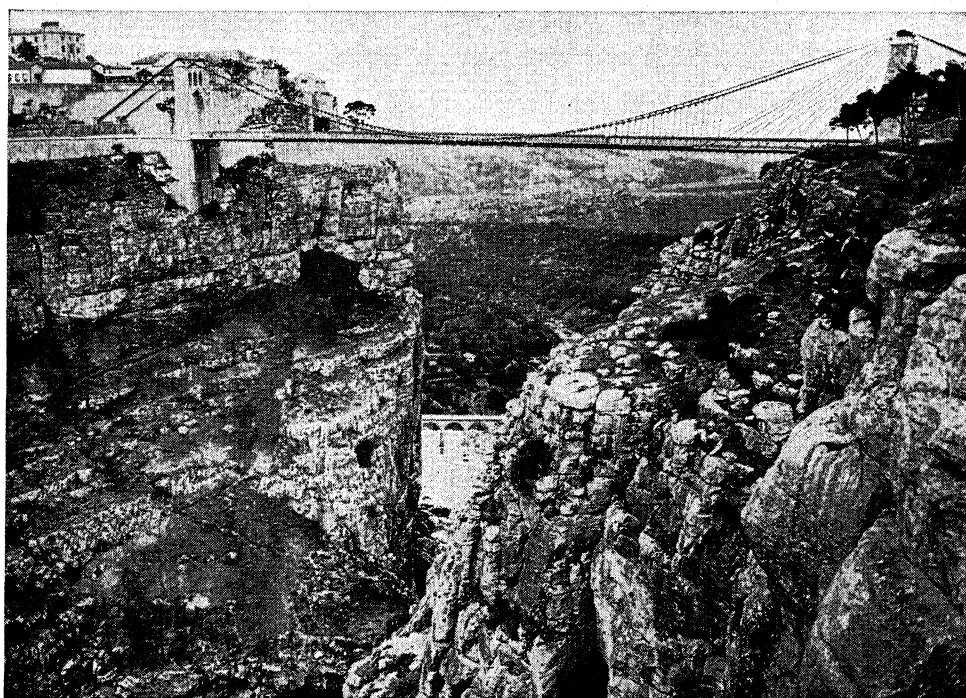
**NATURAL BRIDGE—HANDIWORK OF THE KICKING HORSE OF YOHO**

Yoho National Park in British Columbia, Canada, is the setting of the Kicking Horse River. In true bronco fashion, the Kicking Horse battered away until it fashioned this natural bridge.



### CONSTANTINE, ALGERIA, PERCHES ABOVE THE RHUMEL RIVER

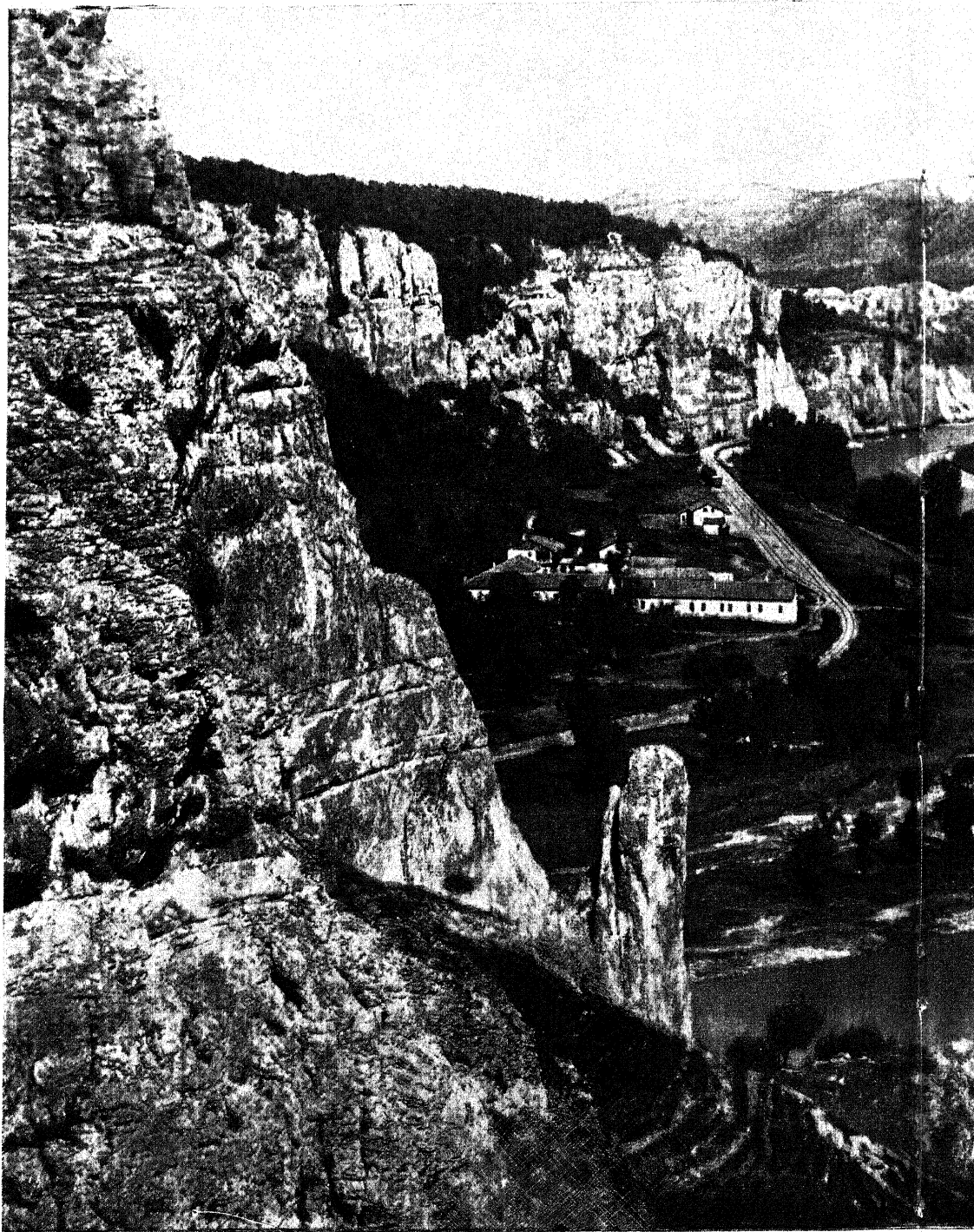
The magnificent site of this city, on a high, rocky ledge, was formed by the Rhumel River and one of its branches. Worn by the water, the ravine is now 100 to 700 feet below the city.



PHOTOS, EWING GALLOWAY

### A HIGH POINT ON THE PRECIPITOUS GORGE OF THE RHUMEL

In places the course of the river goes underground so that there are a number of natural bridges in Constantine. Elsewhere man has built spans, which seem to float with airy grace.



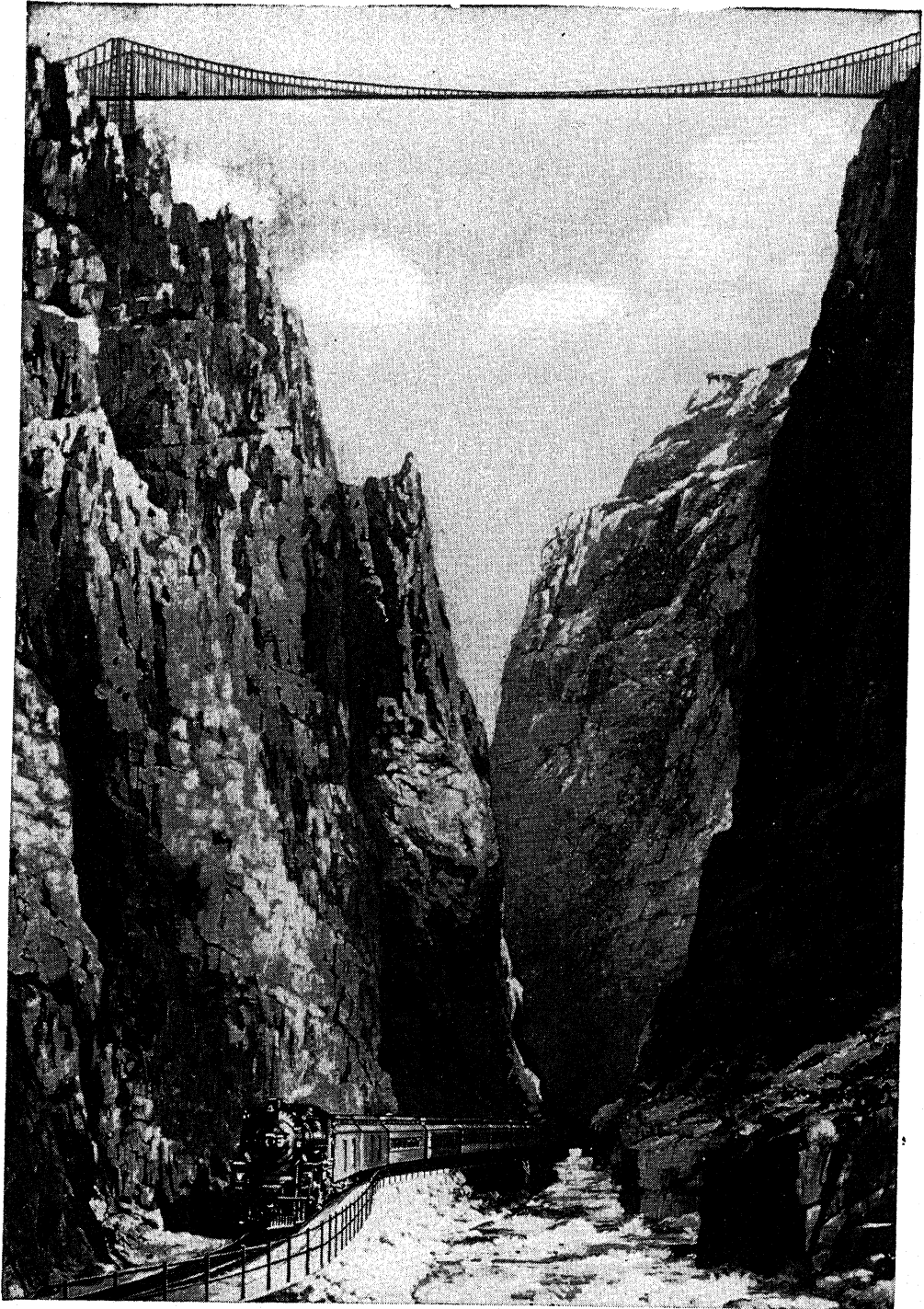
**THIS VERDANT VALLEY**, watered by the Bulgarian river Isker in its rapid descent, was once a lake. That is the way many a fertile valley began. A river may be blocked by ice or lava and a lake formed on the bottom of which sediments accumulate. In time, when the outlet has been cut down, the smooth bottom deposits are exposed and become the floor of





© E. N. A.

the fertile basin. Many such basins exist in different parts of Canada and the United States. Sometimes an underground river, by eating away a soft limestone stratum near the surface, will cause a subsidence, which appears to-day as a plain ringed about by cliffs. Such a collapse, in conjunction with severe earthquake, occurred in Yugoslavia in 1927.



DENVER & RIO GRANDE WESTERN

**ROYAL GORGE, 1,053 FEET DEEP, SPANNED BY HANGING BRIDGE**

Royal Gorge is a majestic ravine whose mighty architect is the Arkansas River. Its steep sides are only thirty feet apart in places, above which Hanging Bridge spans them.



# THE GREAT WASTE LANDS

## *Glimpses of the Regions Forsaken by Man*

We usually imagine a desert to be a wilderness of sand or a monotonous plain, but this is far from accurate. In some deserts large areas are covered by an endless succession of dunes; but in others we shall find vast mountain masses and bare, rocky tracts. Deserts are regions in which few forms of life can exist, owing to the lack of sufficient rain, and the largest are to be found in Africa—the Sahara and Kalahari deserts—and in Asia—Arabia, Persia, Mongolia, Turkestan, Siberia and Tibet—though North and South America and Australia contain deserts also, not to speak of the barren regions at Greenland and Antarctica. Some deserts were formerly under water or were fertile lands supporting a large population. In this chapter we shall read how deserts are formed and learn something of the mysteries they guard.

WHEN we think of a desert, we generally imagine it to be a waterless, treeless expanse of sand, quite devoid of any sign of life. This idea is, of course, quite incorrect, for all deserts contain some oases—fertile spots that provide enough water to support human and animal life. And despite the hardships and discomforts of the desert life, those who venture it seem to find it strangely fascinating.

Were we to visit various deserts we should observe many strange things—storms without rain; rain clouds from which no moisture falls; rivers that disappear into the sand; seas that shrink or grow larger for no obvious reason; lakes with no outlets that are so highly impregnated with salt that they do not freeze in the coldest winter; waterless river-beds and plants without leaves.

One curious thing found in a desert is described by an explorer in Libya. He tells of an oasis where there was an enormous number of snails, which lay so thickly upon the ground as to give the appearance of a light fall of snow. Another mystery of the desert is the mirage. About an hour after dawn in the southern Libyan Desert a mirage regularly reveals the country lying from twenty to seventy miles ahead. The Arabs call this optical illusion "the country turning upside down."

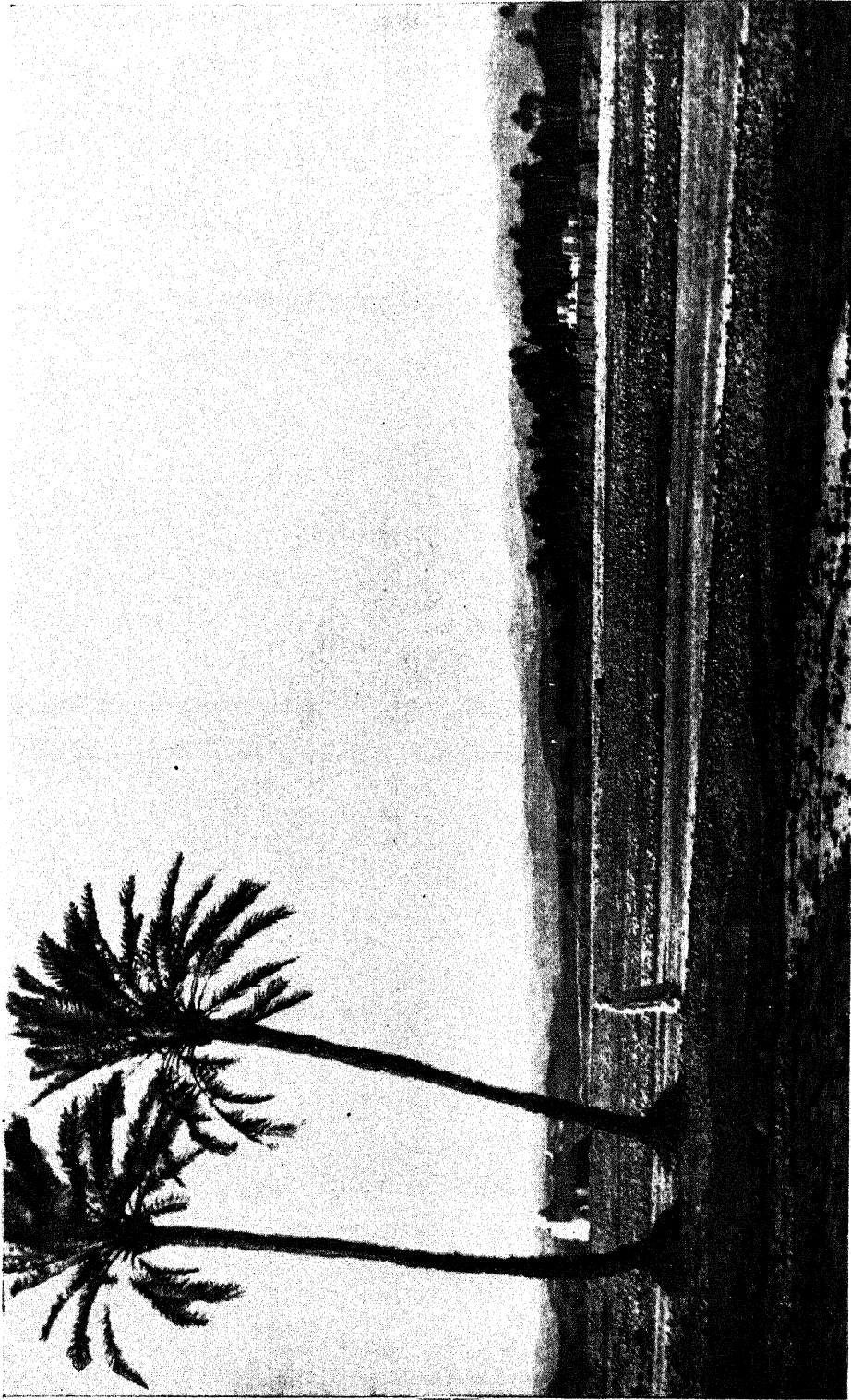
Deserts are among the most interesting places upon the face of the globe. Like the sea, some of them give travelers an impression of infinity, with their vastness

and overwhelming solitude, and they present to them a wonderful contrast with the crowded cities and busy countryside of civilization.

Some deserts are in the lee of mountain ranges, so that by the time the rain-bearing winds have reached them they have discharged most of their moisture. It is to this fact that they owe their origin and their peculiar characteristics of desolation and sandy waste. Then there are the trade-wind deserts like the Sahara. But no desert is rainless, and all have an occasional "wet" season when grass grows more thickly than is the rule.

It was once thought that deserts were plains of smooth sand which, ages ago, lay at the bottom of the sea, from which they were long ago raised by upheavals of the earth's surface. Scientists tell us, however, that the sands of most of the large deserts of the world, as we find them to-day, have been formed by the breaking-up of rocks.

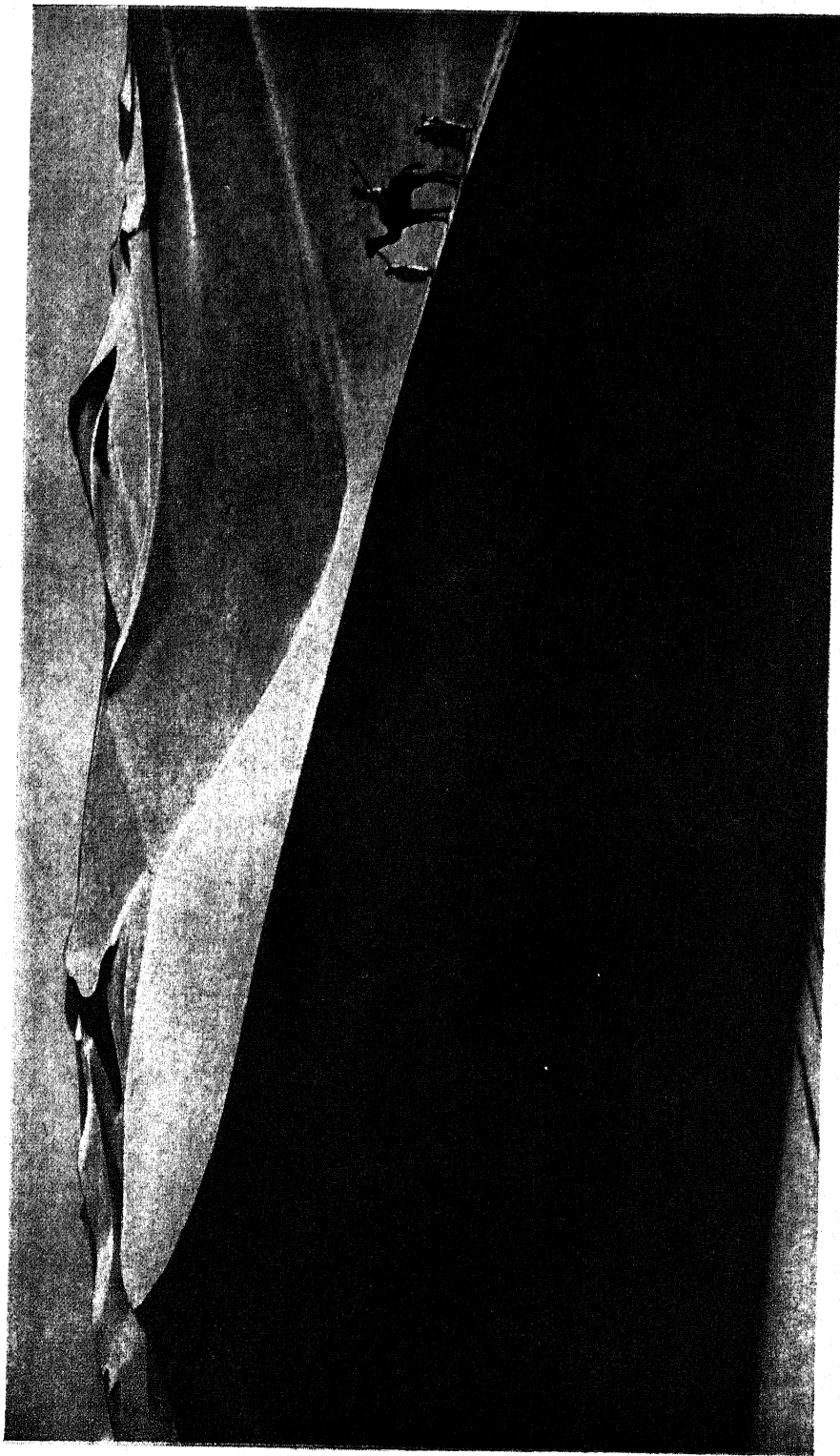
When a rock gets very hot—as it would when exposed all day to the heat of the sun—it expands; when it becomes cold again it contracts. In a relatively dry atmosphere the sun's rays, beating down with great intensity, have such abnormal strength that the nights are correspondingly cold. The change from intense heat to cold is very sudden, and the rocks expand and contract so rapidly that they split. The pieces split again and again and again, until at last the rock becomes sand, the fine particles of which are blown about and into hills and dunes by the wind.



CLINTON A. HANCOCK

**THE BARBARY STATES** all merge, on the south, into the great Sahara Desert; oases, at first frequent, become fewer and fewer, until uninhabited country lies before the traveler. The oasis shown above, Gafsa, or Capsa, in Central Tunisia, like many other towns of North Africa,

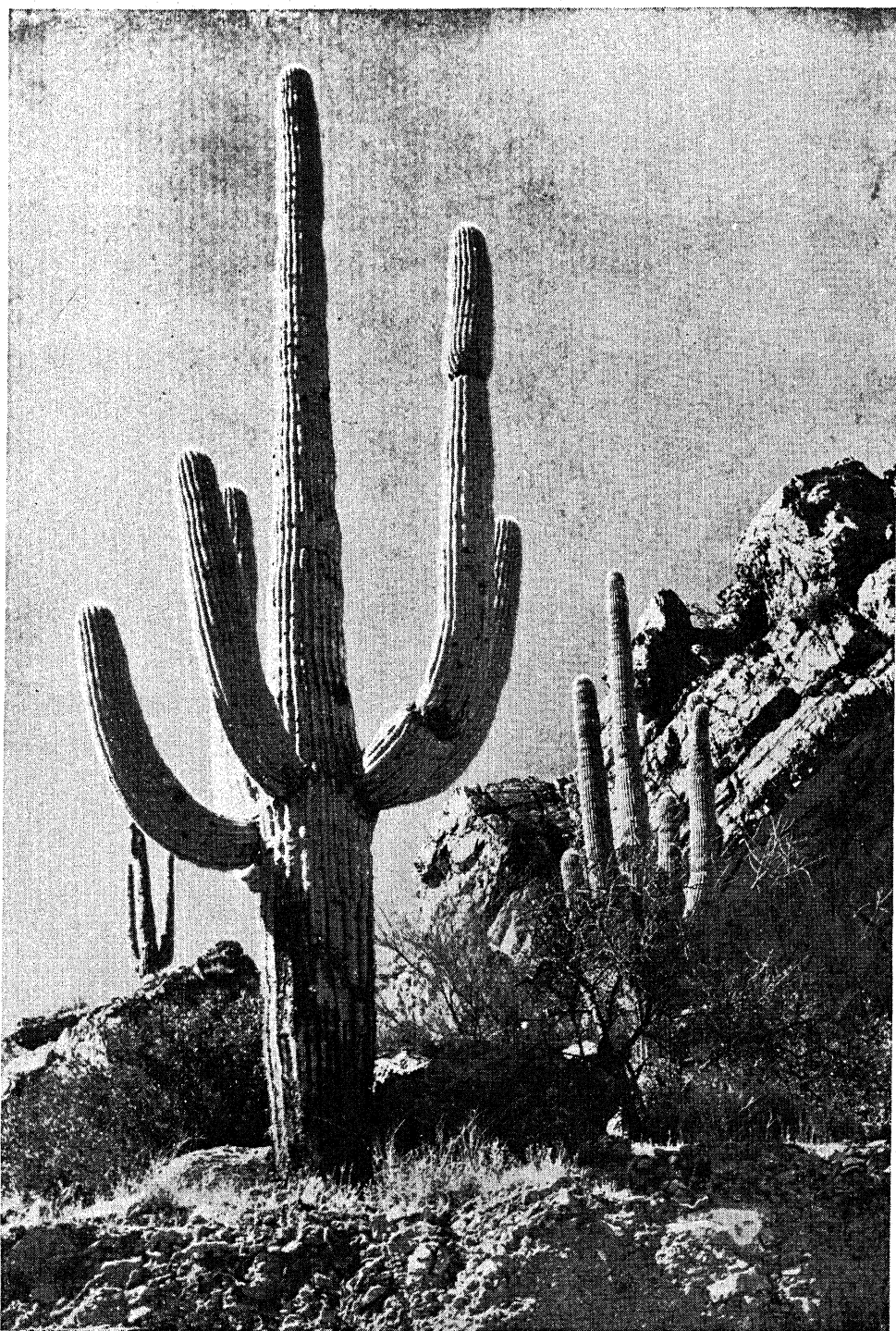
was once a Roman settlement. It has hot springs, and to the west of it lie large beds of phosphate that make the desert, often so useless to man, a source of wealth. Gafsa lies not far north of the low-lying Chotts, or salt pans, which here border the Atlas Mountains on the South.



© LEHNERT & HARDROCK

**THE SANDS OF THE SAHARA** are rarely smooth and flat. Among the dunes are miniature hills and valleys, sharp-edged ridges and cup-like hollows the contours of which are forever shifting. Should one of the dreaded sandstorms occur, this long yellow ridge, that casts so deep a

shadow now that the sun is low, may disappear entirely; the strong wind may raise the dry sand and powdery dust high in the air until they resemble a thick wall. A caravan caught in such a suffocating storm must lie close to the ground until the air clears again.



PHILIP GENDREAU

**THRIVING IN THE DRY AIR** of Arizona, where few plants could endure, the saguaro cactus may grow to heights of more than sixty feet and live for hundreds of years.

## THE GREAT WASTE LANDS

The sands of the desert may be compared with the dust that forms on our own high roads during a long, dry summer. But when the autumnal rains and storms of winter come all this dust is washed away, only to be renewed when summer returns. In a desert no such removal is possible; there is only the wind to blow it from place to place. The sand increases year by year, owing to the disintegration of the solid rock that is continually being exposed by the wind.

### *Deserts Likened to the Sea*

Just as the camel has been poetically called the "ship of the desert," so may a huge expanse of sand, such as the Sahara, be likened to the sea itself. Its surface, lashed by fierce gales, sometimes rises in waves of sand which move before the wind.

Sometimes, too, whirlwinds will sweep over the desert and raise mighty pillars of sand that may be compared with the water-spouts of the ocean. Twenty or thirty of these sand-spouts have been seen at the same time, all moving in the same direction and their tops reaching almost to the clouds. Oases—still to compare the desert with the sea—are fertile islands without the existence of which travelers could not cross the vast ocean of sand.

At these havens the thirsty and wearied travelers find refreshment for themselves and their camels, are enabled to refill their water-bottles and to recover their strength for the next stage of their weary journey. But it should be remembered that an oasis can sometimes betray the traveler by vanishing entirely. In 1803 a caravan proceeding from Timbuctoo to Tafilet, in the Atlas Mountains, reached an oasis only to find that the water had disappeared. Two thousand human beings and 1,800 camels perished.

### *Vast Deserts of the World*

All deserts do not consist of unbroken tracts of sand. Sooner or later stone-strewn wastes or even outcrops of solid rock will be encountered, and often, as in the Libyan Desert and the Sahara, we

may find mountain ranges rising to a height of many thousand feet above the level of the plain. Sometimes such mountains cause rain to fall and so their valleys are often fertile. Hence in many so-called deserts there are tracts which are capable of supporting a large population.

Perhaps the most famous desert in the world is the Sahara Desert of North Africa, which stretches from the Atlantic to the Nile and from the south of the Barbary States to the region of the River Niger and Lake Chad.

An almost uninterrupted series of deserts stretches eastward from the Nile through Arabia, Mesopotamia and Persia. Then, by means of the more or less desert-like tracts of Baluchistan and Sind, we reach the Thar, or Great Indian Desert, in Rajputana. Northeast of the Thar, across the Himalayas, lie the barren plateau of Tibet, the Gobi Desert of Mongolia and other wastes of Central Asia.

In South Africa is the Kalahari Desert. North America possesses in the southwest such barren regions as the Painted, Gila and Mohave deserts; and in the southern continent of America there is the desert of Atacama, stretching along the border of Chile and Perú and the Peruvian coast. Almost the whole of the interior of Australia is desert.

### *Tibet a Cold Desert*

Most of Tibet is more or less desert. It is a wild and mountainous region with an average elevation of about 14,000 feet, which makes it one of the coldest desert regions of the world. Tibet is a waste and is, for the most part, bleak and forbidding, the rainfall being so scanty and the atmosphere so dry that the nails and skin may split. Freezing winds sweep across this inhospitable land and raise up great whirlwinds of dust.

Nevertheless, there is an abundance of animal life. Yaks, gazelles, goats, marmots, wild asses and hares are to be found on the higher mountains, for even here they find grassy pastures in summer. The yaks will wade into icy lakes to feed





© E. H. A.

**THE SINAI PENINSULA**, that inhospitable triangle of land nearly the size of Ireland that joins Arabia to Egypt, is the desert through which the Children of Israel wandered after the Exodus. It is even more barren now than it was then, for the few trees that used to grow upon

it have long since been cut down. This bare, rugged mountain rising steeply from the plain is called Jebel Musa—the Mountain of Moses—though it is a moot question as to whether such a waterless plain surrounded the mountain upon which Moses received the Law.

## THE GREAT WASTE LANDS

on the waterweed that grows on the bottom. In considering the forms of life that may be found in the most utterly barren land, it is interesting to learn that on Mount Everest small spiders were discovered living on islands of broken rock in seas of snow and ice, at a height of about 23,000 feet above the sea. There was no vestige of any other living creature or vegetation near them. For food they ate one another!

The sun beats down steadily on the sandy plains that are located in the northwestern part of the Indian Peninsula. So powerful is its glare that, before the nation of Pakistan came into existence, the prices of grain in the Punjab could be signaled by mirrors across Rajputana to Sind and Bombay.

### *Wastes of Northern Siberia*

Across the north of Siberia, within the Arctic Circle, stretch the tundras—marshy moorlands and immense tracts of treeless swamps. These marshes are largely uninhabited and for several months out of the twelve are difficult to cross.

June and July, however, are two months of continual day, when the sun is very hot indeed. The rivers open by late spring; the snow disappears; and vast fields of buttercups, dandelions, forget-me-nots and other flowers are to be seen. Acres and acres of crowberries and cranberries ripen toward the end of the Arctic summer, and the air is full of mosquitoes and flies.

If the berries do not ripen till the end of this strange summer of continual daylight, upon what do the fruit-eating birds live? Here we encounter an almost incredible fact—the birds live upon last year's fruit! When the summer comes to an end much of the ripe fruit still remains, and throughout the bitter winter it is preserved by a natural cold-storage system, still clustered on the plant.

### *Deserts Not Unchanging*

Because an area is now an arid desert, it does not follow that it always has been and always will be. In the heart of the Sahara are great depressions and valleys

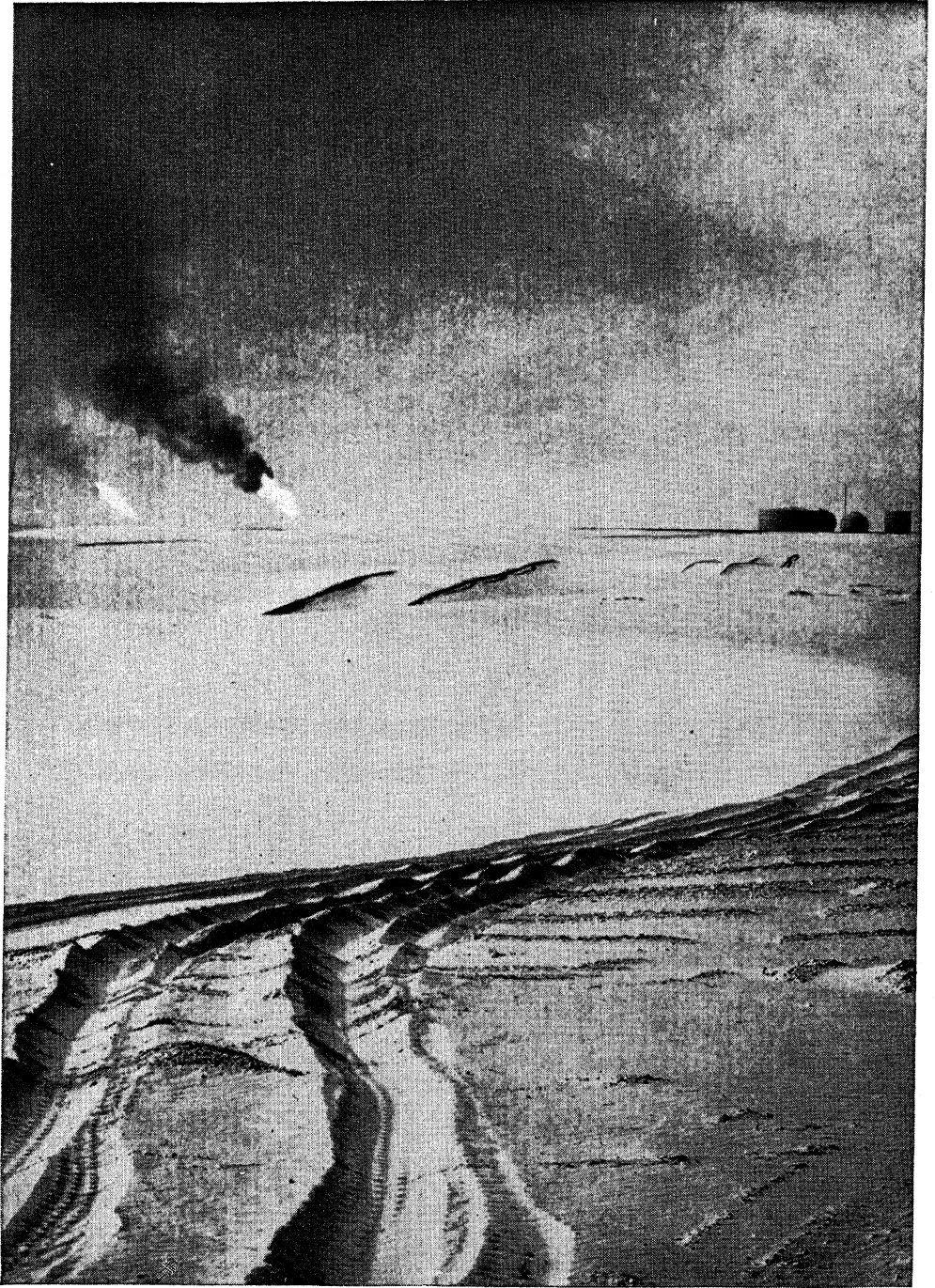
that once were undoubtedly occupied by large rivers. In the deserts of Persia and elsewhere there are lakes so salt that their water is undrinkable, and stretches of ground encrusted with salt; these districts were once inland seas that are now almost entirely evaporated. In southern Arabia and in Sinkiang travelers have discovered, buried in the sand of the deserts, ruins of once mighty cities.

Scientists have also virtually proved that mankind originated in the plateau of Central Asia, which is now, to a great extent, desert land. We know for certain that during the dim and distant days of the Stone Age human beings dwelt on the shores of the large lakes and rivers that were then found on what is now the sandy wastes of the Gobi. That this land must once have been able to support life on a larger scale is proved by the fact that an expedition which, in 1922, set out to explore this inhospitable region, discovered not only the eggs, but excellently preserved skulls and skeletons of dinosaurs—monstrous prehistoric reptiles.

### *Sand Dunes of the Gobi*

The enormous Gobi has comparatively few oases. It extends for a distance of about 1,500 miles from east to west and about 600 miles from north to south, the greater part of it being occupied by large stretches of sand dunes that are unrelieved by any form of life. We can get a vivid idea of this barren land by looking at the photograph in the article on Mongolia.

That deserts may be reclaimed has been proved by the fact that many former desert areas are now being profitably cultivated. Desert soils are especially rich in potash and lime—chemicals that are splendid fertilizers—and where a river crosses a desert, irrigation can usually be carried on with great success. This has been done in the valley of the Nile and in parts of the Great Basin of North America. But if the river has cut a deep channel in the rock and flows far below the surface, artificial irrigation becomes too expensive to be profitable. In parts of the Australian Desert artesian wells have been sunk successfully.



ARABIAN AMERICAN OIL COMPANY

### THE LIFELESS DESERT OF SAUDI ARABIA YIELDS HIDDEN WEALTH

Near Abqauq and the Persian Gulf in the eastern part of the country, where rich oil fields have been discovered, pipes have been laid to transport the oil from field to plant. Smoke columns on the horizon are caused by burning off the poisonous gases. Petroleum is by far the most important mineral resource of the country as well as its most lucrative export.



RAYMOND WILSON

### MILES OF OIL PIPELINE CROSS THE ARID PLATEAU OF IRAN

As far as one can see, the land looks barren. Only a little grass grows on the stony hillocks, rounded by wind and weather. Most of Iran's vast petroleum resources are in the foothills of the Zagros Mountains, on the southwest edge of the plateau. To carry the oil from its source to ports on the Persian Gulf, pipelines are laid through the desolate wastes.





#### WHERE THE ANDES ARE SERE AND BROWN

The coastal zone of Peru is largely a sandy waste, studded here and there with rocks. Behind rise the towering Andes, brown as the barren shores they frown upon. Rain falls rarely on this strip. The fishing craft, above, are returning to Talara, a port in the north. The discovery of oil in the vicinity and its recovery are bringing prosperity to this region.

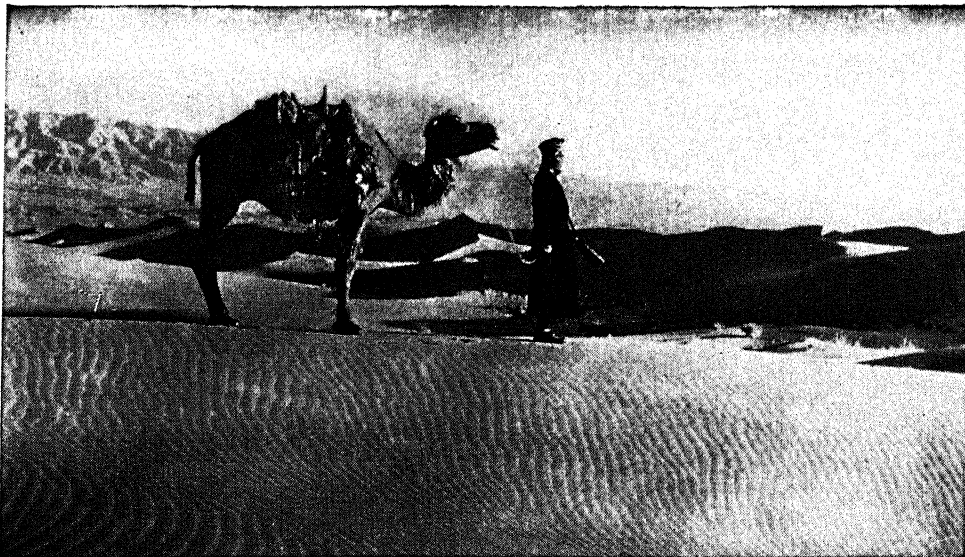


PHOTOS, STANDARD OIL CO. (N. J.)

#### OVER THE TRAIL, TOWARD HOME

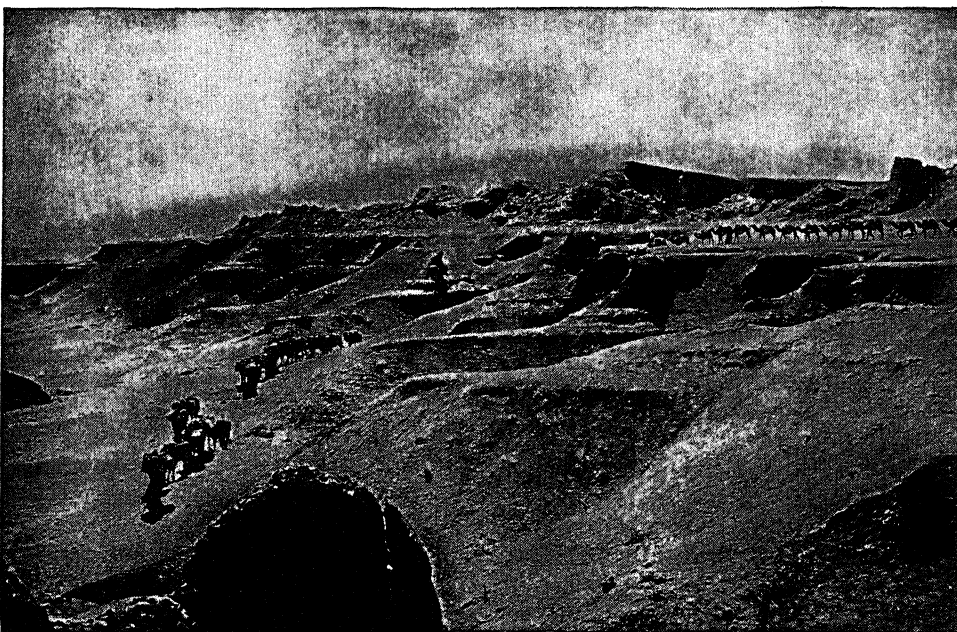
The soil of the coastal strip is fertile. It needs only water, and crops grow readily in the river bottoms where every inch of land is tilled or used as pasture. In order not to waste useful ground, towns are built along the arid hills. Burros are here being driven home along a sandy trail, after pasturing and watering in the valley, near Talara.





#### A LONE SENTINEL GAZES OVER THE WASTES OF THE GOBI

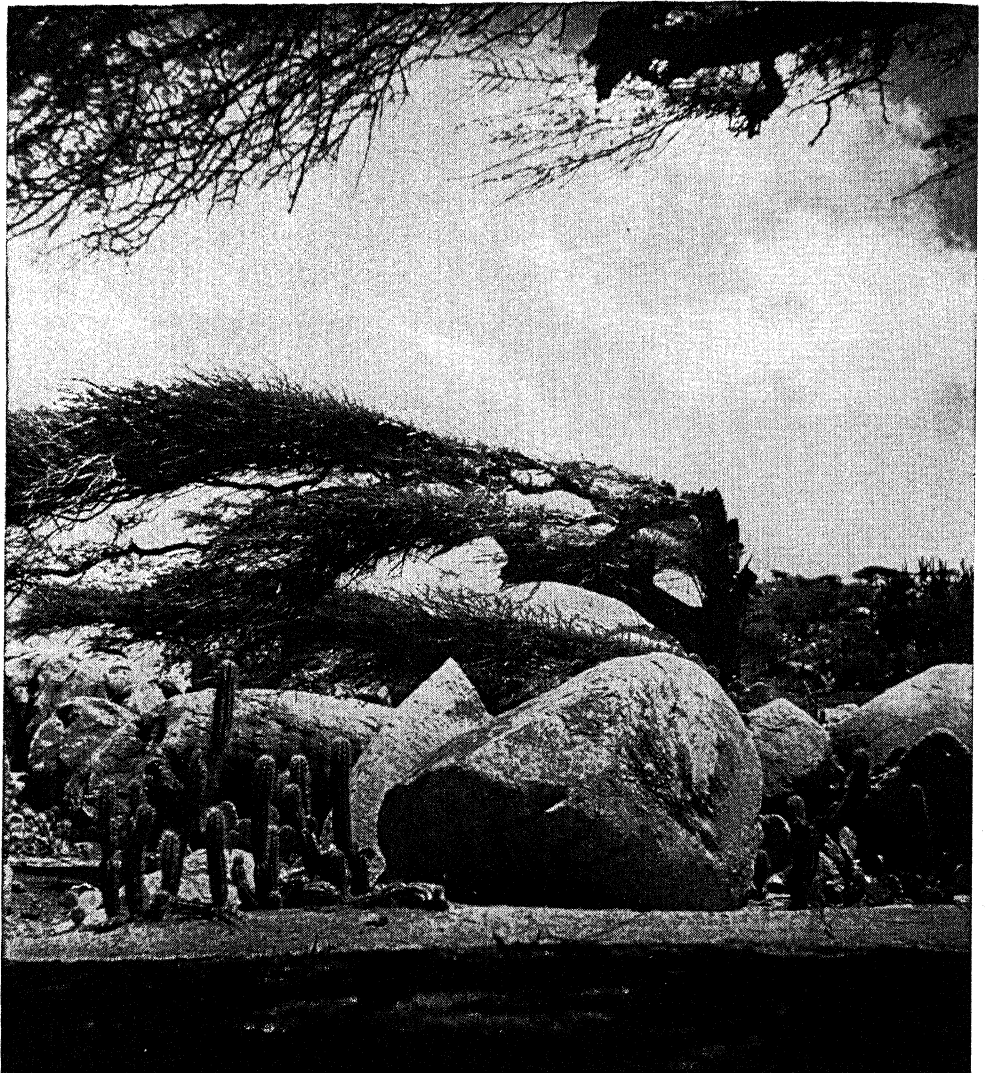
Not even a thorny shrub breaks the monotony of the endless miles of sand and rock. Winds have sculptured the sand into a rippled pattern, which will break and reform with the next gust. The Gobi is surrounded by mountains to a great extent, so that the few streams—they could hardly be called rivers—never reach the sea but vanish into lakes, or mors.



PHOTOS, AMERICAN MUSEUM OF NATURAL HISTORY

#### STEPS IN THE GOBI—A SERIES OF RUGGED CLIFFS

A camel caravan winds down through a region that is more rock and stone than sand. Desolate as the Gobi is today, scientific expeditions have found evidences here of a very old civilization. They have also found one of the world's richest beds of fossils, including the first dinosaur eggs known to science and the remains of the oldest and largest mammals.



STANDARD OIL CO. (N.J.)

A **DIVI-DIVI TREE** seems to be streaming in the wind among the rocks and cactus of the dry little island of Aruba. The island, off the coast of Venezuela, is in the Dutch West Indies.

Although the Kalahari Desert of South Africa contains seemingly endless expanses of sand, and although rivers are unknown and its sands had the same origin as those of other deserts, there are periods of the year when parts of it could most certainly not be called desert. To quote one explorer: "During the brief weeks of rainfall no land can assume a fairer or more inviting aspect. The long grasses shoot up green, succulent and elbow-deep; flowers spangle the veldt in

every direction; the air is full of fragrance, and pans of water lie upon every side. Another month and all is drought."

The same applies to parts of the Arabian Desert, that, for a short time, provide the wandering Beduin with pasture for his herds. These facts and the fact that, wherever there is a spring in the Sahara, a grove of fruitful date palms is found, all prove that desert soil is often far from sterile, and only water is needed to make it "blossom like the rose."

# THE WONDER OF THE WATERFALL

## *World-famed Scenes of the Thundering Waters*

Perhaps it is not surprising that many famous sights disappoint us when we first see them. We have heard so much and read so often about them that we form great ideas in our mind, and when in later years we have the good fortune to stand before them we somehow feel that they do not come up to our mental pictures. But this is not so with Niagara. No description, no picture, can exaggerate the majestic beauty, the fascination of the famous falls. The pictures shown here of these and other falls both in North and South America, as well as in Europe, compel interest and admiration, and show that waterfalls must be classed among the most pleasing features of Nature. This chapter on waterfalls in many lands explains how they come into existence and why the great falls tend to move nearer and nearer to the source, many times a lake, from which their waters flow.

**M**OVING water, in its various forms, plays an important part in connection with the changes, large and small, which the earth's surface is always undergoing. The slow-moving glacier, working by means of the gravel and bowlders which it rolls along, carves out and smooths down the ground over which it travels, while rain washes away the hills, and the sea is ceaselessly at work along the coastline. But more important by far is the action of water in the shape of torrent, stream or river.

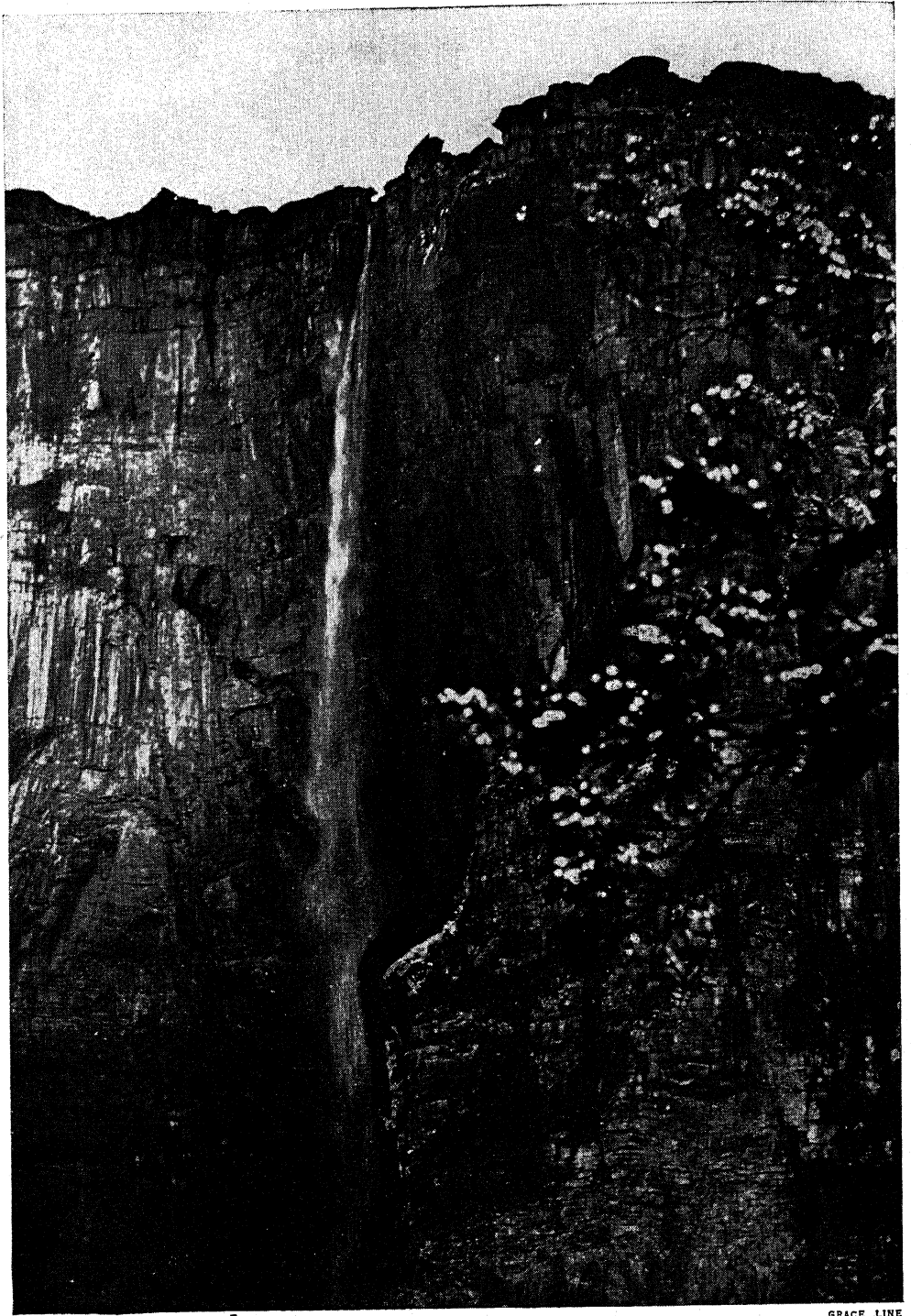
If all rocks were equally hard there would be nothing to prevent a watercourse from making for itself a valley of uniform width with sides of equal steepness and with a valley bottom of the same slope from the source to the sea. As, however, there are layers or "strata" of varying hardness, this gnawing-out process or "erosion" goes on more rapidly in some places than in others, with the result that during its course a river may slide smoothly over hard rock, may be confined within a gorge where the stone is soft enough to be eaten away quickly or may wind in a wide valley where the soil is earthy and level.

In dealing with waterfalls we are specially concerned with those conditions which prevent a river from making for itself a valley bottom with a uniform slope. These conditions may be best illustrated by a description of the world's two most famous waterfalls, Niagara Falls and the Victoria Falls of the Zambezi.

Under the name "Ongiara," Niagara Falls appear on Sanson's map of Canada, published in Paris in 1657; but the first white man to see them was Father Hennepin, a member of La Salle's expedition for the exploration of the Mississippi (1678). He describes them as "a vast and prodigious cadence of water, which falls down after a surprising and astonishing manner, insomuch that the Universe does not afford its parallel. The waters which fall from this horrible precipice do foam and boil after the most hideous manner imaginable, making an outrageous noise, more terrible than that of thunder."

This "outrageous noise, more terrible than that of thunder," gave the falls their name, for Niagara is an Indian word which means "thunder of waters." The Niagara River runs from Lake Erie into Lake Ontario, a distance of nearly 33 miles. The difference in level between the two lakes is a little over 300 feet, of which more than half occurs at the falls. Probably not less than 25,000 years ago, possibly more, the river ran from Lake Erie right across the plateau to the edge of a steep drop about five miles from Lake Ontario, and Niagara Falls were thus within a few miles of Lake Ontario. Since then they have receded upstream a distance of over seven miles to their present position.

This receding or "cutting back," which may be taken to average about five feet a year, is a result of the formation of the



GRACE LINE

**ANGEL FALLS, HIGHEST IN THE WORLD, PLUNGES OVER A PLATEAU**

The waterfall hurtles more than three thousand feet in an uninterrupted cataract down the side of a cliff in the Guiana Highlands, deep in the jungle land of southeastern Venezuela.

## THE WONDER OF THE WATERFALL

rocks. The upper plateau is covered by hard limestone overlying softer strata. The backwash of the actual falls, by wearing away these shales, undermines the layer of limestone, fragments of which break off from time to time. While the upper part of the river does not deepen its bed to any great extent, a gorge, from 200 to 300 feet deep, has been formed below the falls.

As the falls move upstream, the gorge is further hollowed out, so that, after a period which has been calculated at about 50,000 years, it will extend right up to Lake Erie, and be three times its present length.

A good example of the end of such a process is presented by the Rhine Valley between Basel in Switzerland and Cologne in Germany. From Basel to just below Mainz the Rhine flows through a plain. Thence, to a short distance above Cologne, the valley is narrowed to a gorge. Ages ago the upper reach, now a wide plain, was a lake. Its waters gradually worked their way through the Rhenish Slate Mountains. Probably there were falls "cutting back" as we see Niagara doing to-day. When the Rhine gorge reached its present extent, the lake was drained and became a fertile plain. The Victoria Falls of the Zambezi have a very different geological history.

### *How Victoria Falls Were Formed*

Ages ago the great Zambezi River, over a mile wide at this point, flowed placidly through a wide plain, beneath which was black basaltic rock. One day, possibly through some volcanic convulsion such as an earthquake, an enormous crack opened in this hard rock, extending from bank to bank across the river-bed. One of our pictures shows this chasm viewed from its eastern end—in other words, the left bank. The lips of the crack are still quite sharp, and the walls go sheer down from them. This rift, nowhere deeper than 350 feet, and varying in width from 80 to 240 feet, would soon be filled by the river. Here is Livingstone's description of what happened: "When the mighty rift occurred, no change of level took

place in the two parts of the river thus rent asunder, consequently the river suddenly disappears, and we see the opposite side of the cleft, with grass and trees growing where once the river ran."

In fact, after filling up the chasm the river still continued its course over the plain, until it happened that the water was able to find a weak spot even in the hard basaltic rock where old cracks had been filled with softer material. Thus immediately beyond the first curve of rock, on the left of our picture, there opens a narrow gorge about 100 feet wide and 400 feet long. From this point the river has, in the course of ages, worked its way through the hard rock, forming a zigzag series of canyons 40 miles in length.

### *Niagara and Victoria*

Though the final result—falls and gorge—is in both cases similar, there is one great difference. There has been a Niagara Fall, ever since there has been a Niagara River. Victoria Falls only came into existence when the river had found a way out of the crack, and had carved out the great zigzag gorge. Niagara Falls, as we have seen, are moving slowly upstream. But the basaltic rock of the Zambezi is too hard to be undermined by the mere backwash of the falls, which therefore remain much where they were when they first came into existence.

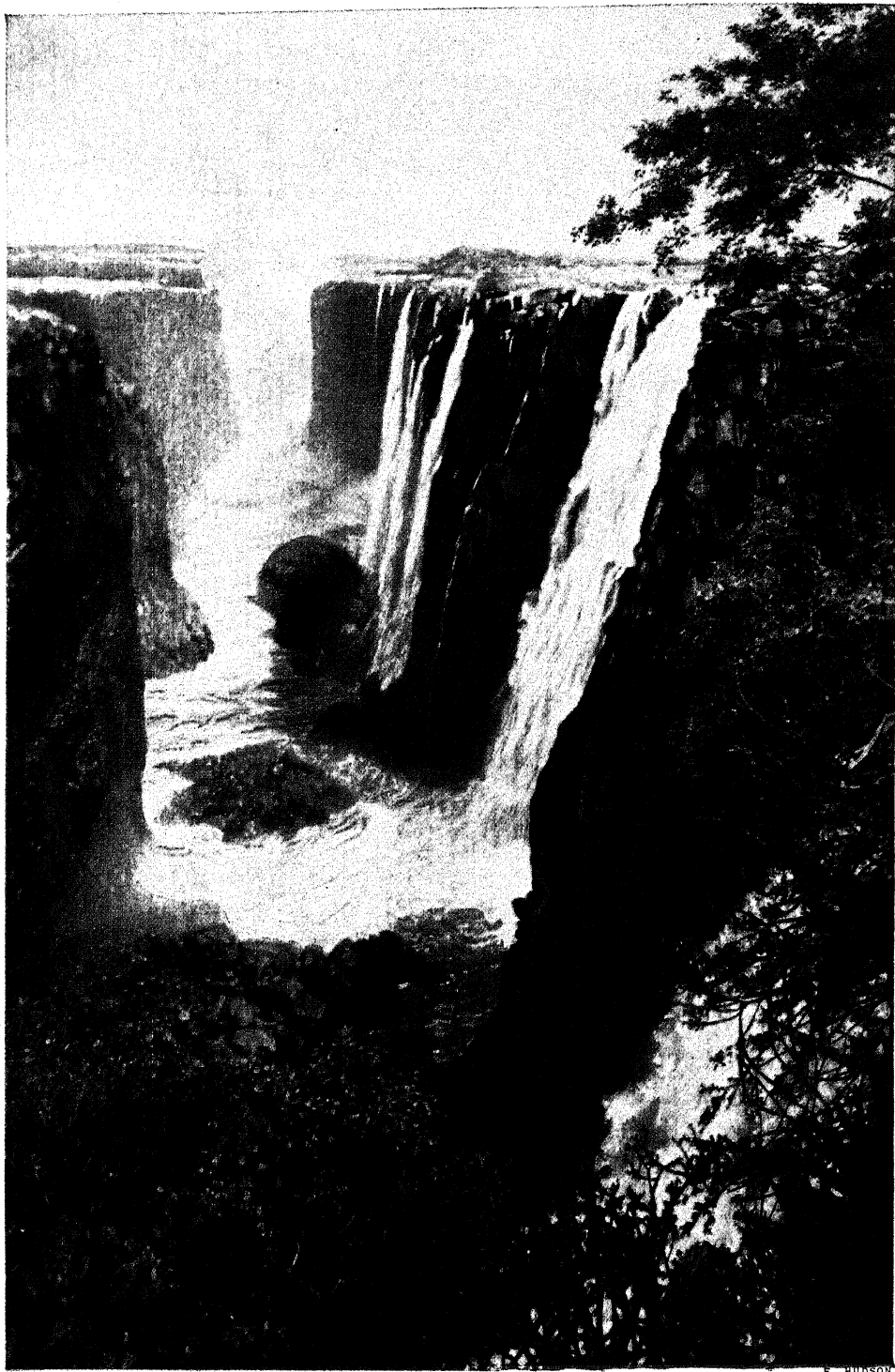
Niagara and the Victoria Falls show us the gnawing-out power of water on its most tremendous scale. The processes we have studied in detail in connection with these two are further illustrated by the pictures given of other well-known waterfalls in various parts of the world.

### *Falls in Other Lands*

Still, the falls of the Laja River in Chile look distinctly like a small-scale Niagara. But even a river of the size of the Sharavati in India may be so broken up by the nature of the ground as to produce a number of cascades.

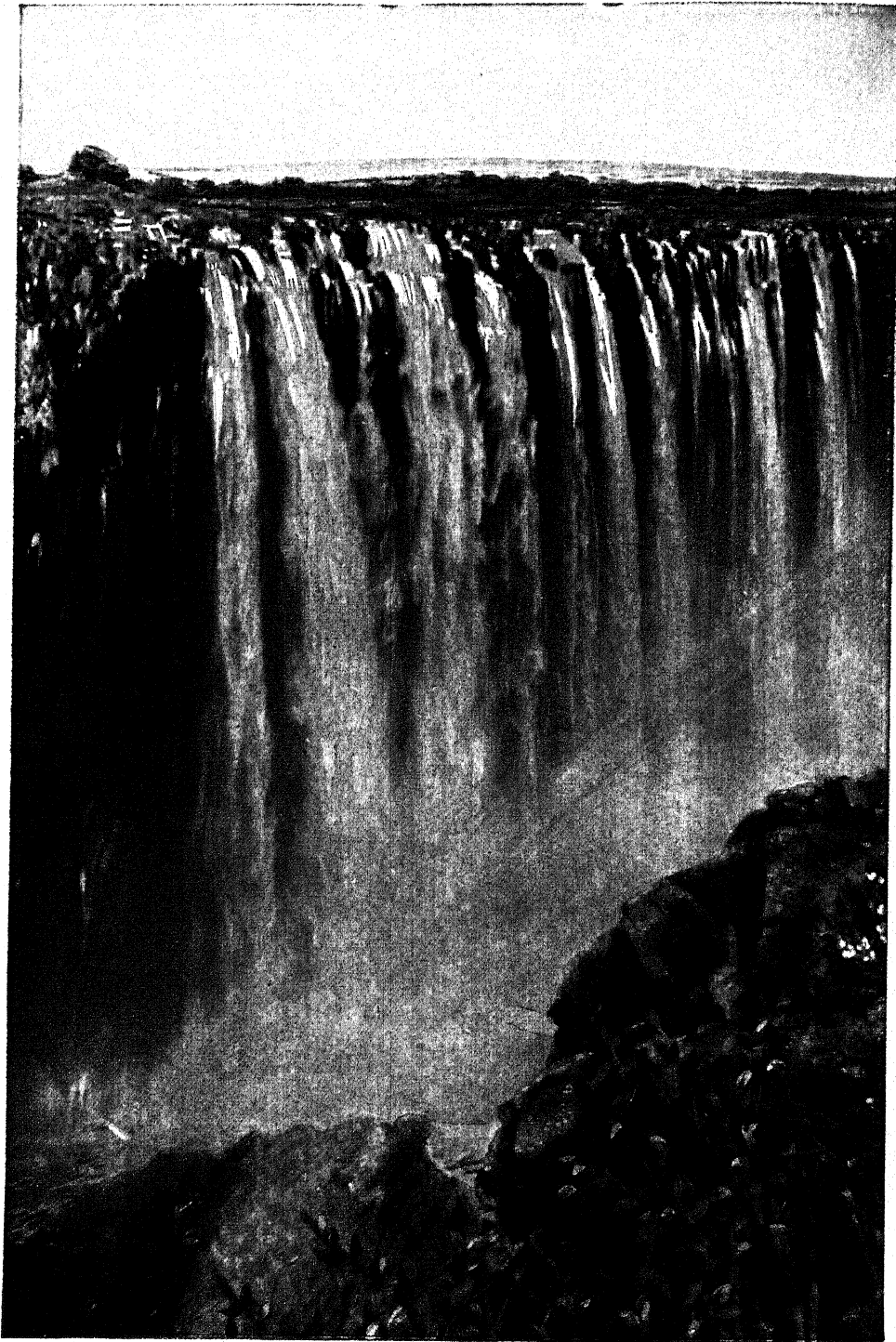
The tremendous plunge of the water at Niagara develops energy amounting to about 5,000,000 horse power. About half of this is turned into electric energy by





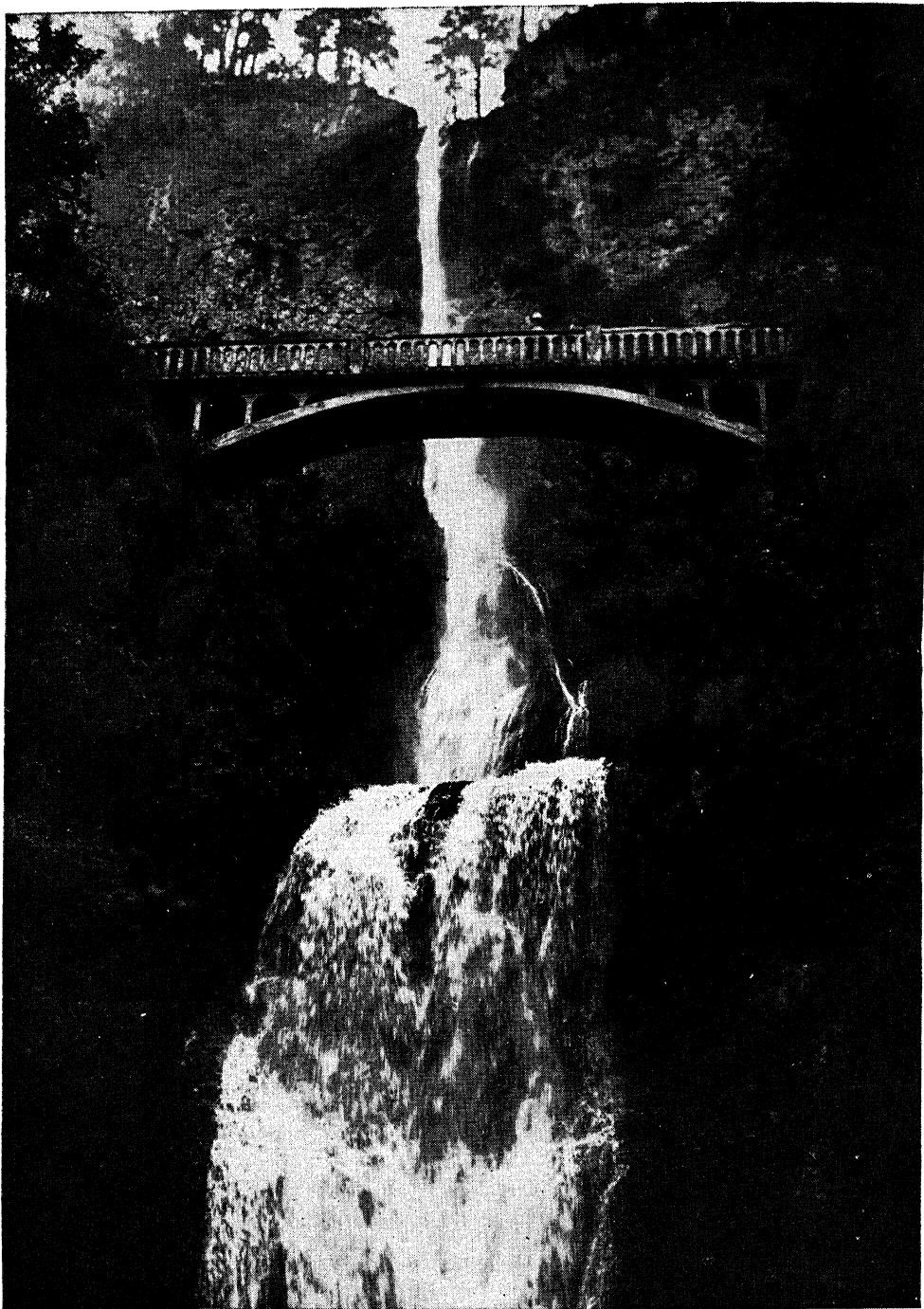
E. HUDSON

**VICTORIA FALLS** in South Africa, known by the African natives as "the smoke that thunders," were discovered by Livingstone in 1855. They consist of several cascades, which hurtle into the narrow gorge of the River Zambezi shown above; and during the rains the columns of vapor that arise from their foaming vortices may be seen twenty-five miles away.



E. HUDSON

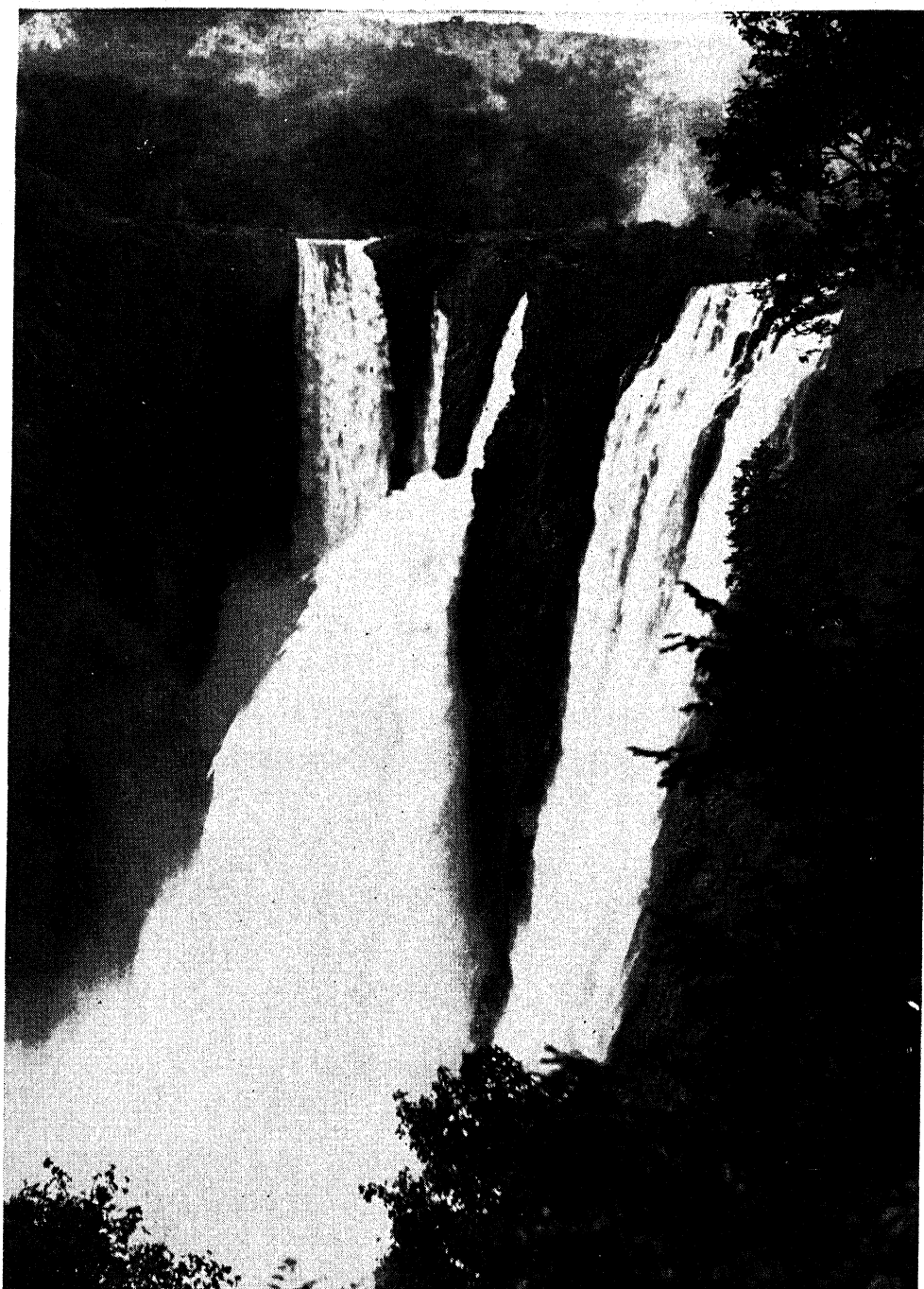
**THE RAINBOW FALL** is the widest of the four which together make Victoria Falls in Africa. The chasm into which the falls thunder beneath rainbow spray is more than twice the depth of Niagara, and the waters of the Zambezi River strike against the opposite wall of the gorge, before entering the forty-mile Z-shaped stretch of the main canyon.



CHARLES PHELPS CUSHING

#### SILVERY DESCENT OF MULTNOMAH FALLS IN NORTHWEST OREGON

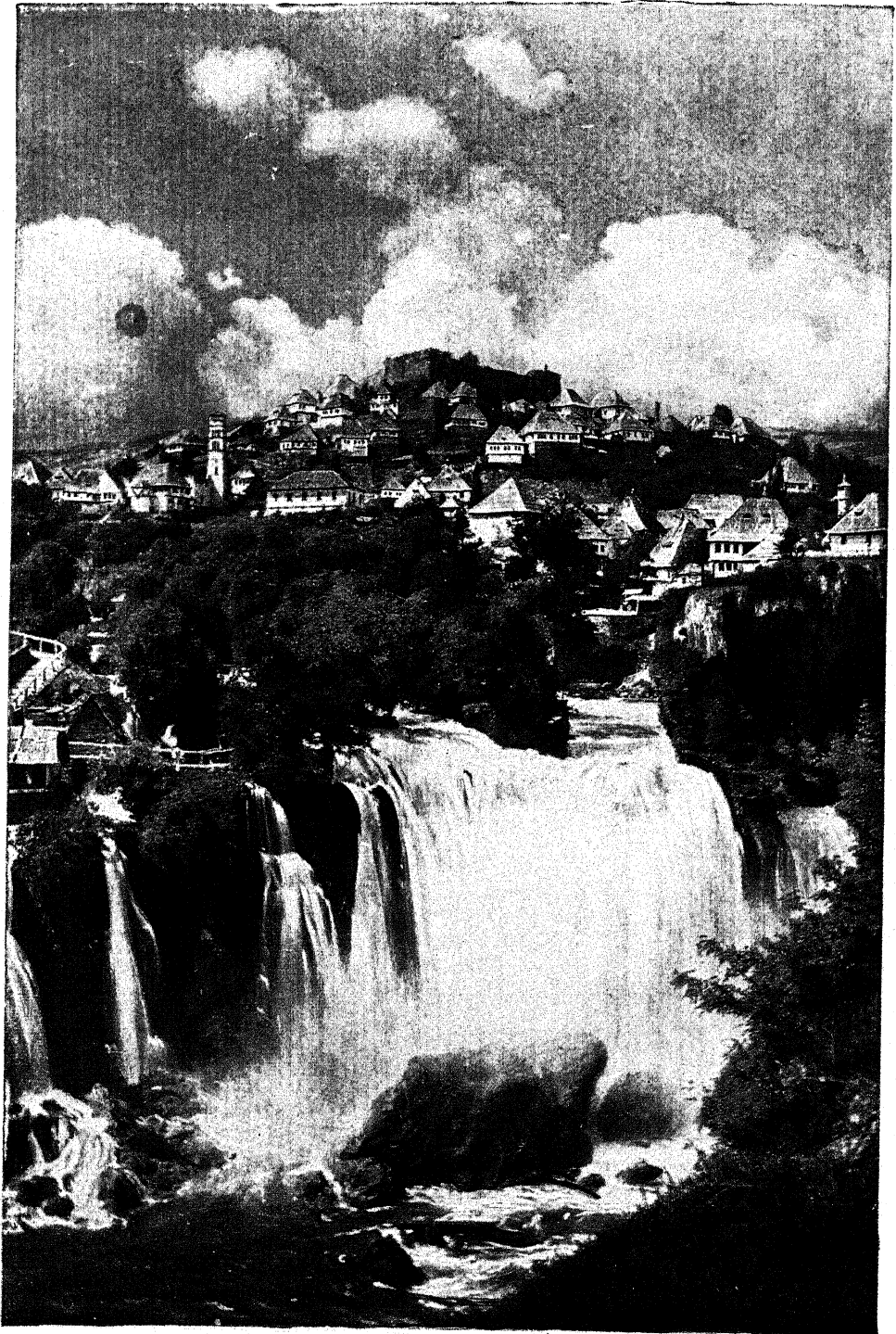
Falling through two cascades, this graceful and spectacular cataract is over eight hundred feet high. It originates in a small stream and drops into the ravine of the Columbia River, not far from the famous Bonneville Dam and about thirty miles east of the city of Portland. It is one of many breath-taking sights in the scenic and mountainous land of the Far West.



EWING GALLOWAY

### GERSOPPA (OR JOG) FALLS, INDIA'S MOST BEAUTIFUL CATARACT

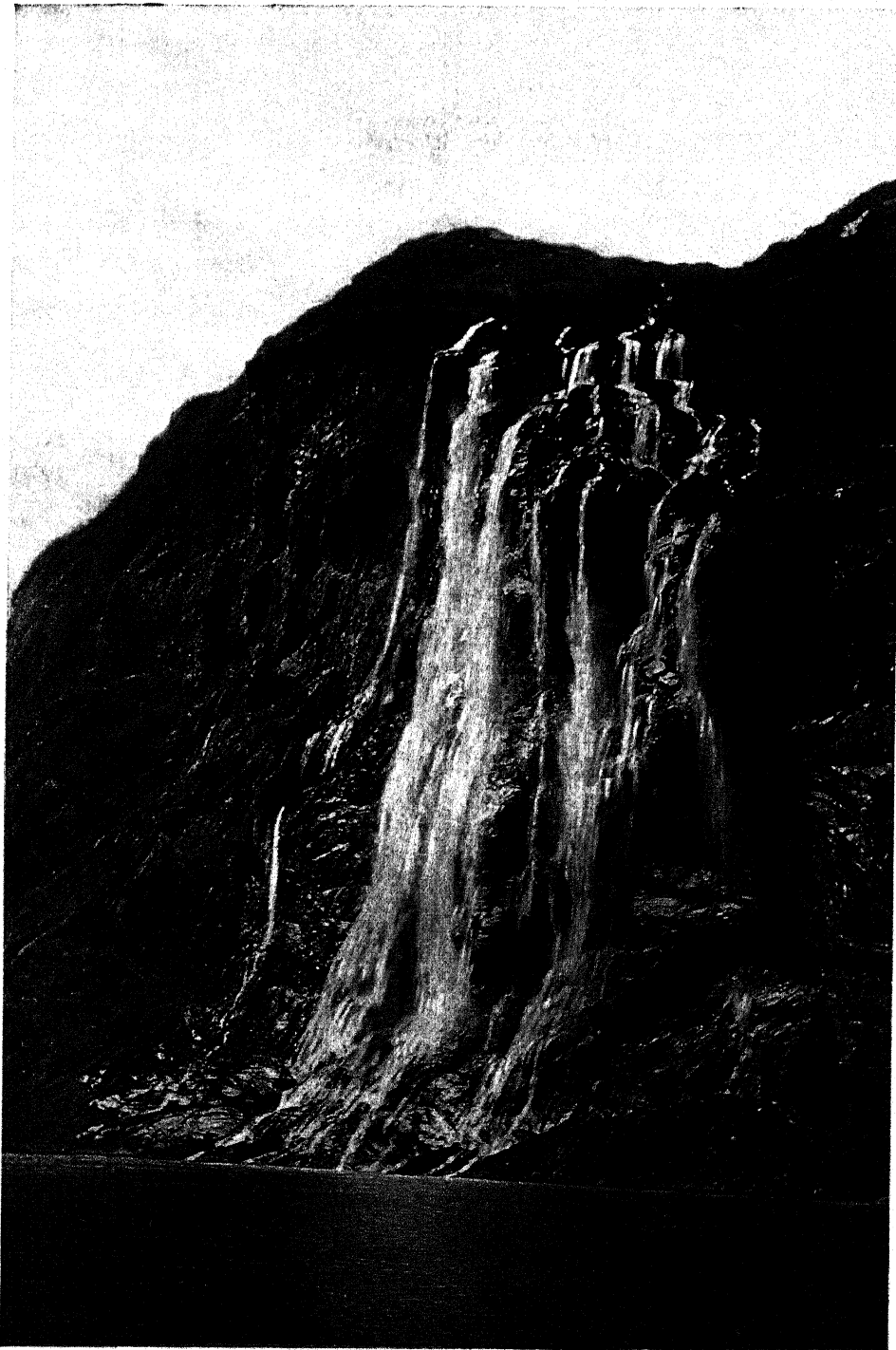
The River Sharavati is in the southern part of Bombay State. On its way to the Arabian Sea, it flows through the range of the Western Ghats, to plunge headlong over a steep cliff. The four cascades of the river, known as the Rajah, the Roarer, the Rocket and the Dame Blanche (White Lady), drop from a height of 830 feet into a 132-foot-deep pool below Rajah.



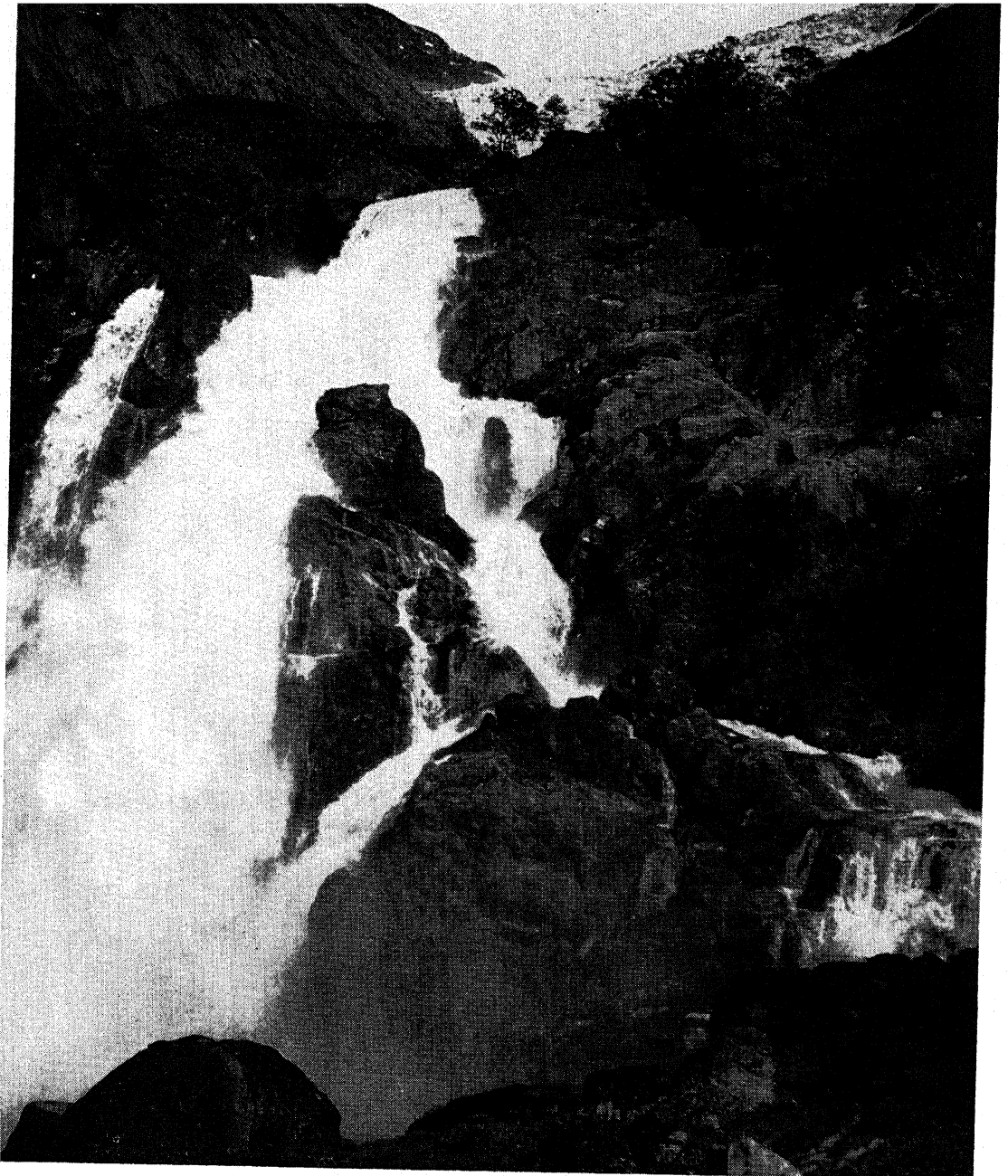
© E. N. A.

**TWO RIVERS MEET** below the red roofs and old castle of Jajce in mountainous Bosnia. The Pliva goes winding past the towns, then suddenly drops ninety feet into the Vrbas, a tumultuous tributary of the Sava, which in its turn joins the Danube. The deep music of the main fall is accompanied by the softer notes of several smaller cascades.





**THE SEVEN SISTERS** drop in a graceful veil of spray from the side of the Geiranger Fiord, one of the narrow fiords, or inlets, that pierce the coast of Norway. To reach this cascade one starts from the seaport of Alesund and goes by steamer through miles of fiords, which in places are shut in by steep precipices hundreds of feet high.



EWING GALLOWAY

#### A GLACIER-FED WATERFALL IN THE NORTH FIORD OF NORWAY

Norway is a land of glaciers. One of them, Briksdal Glacier, is a moving river of ice that empties itself into the majestic North Fiord in the guise of the rushing cataract shown above.

diverting water through the generating plants on either side of the river.

The highest waterfall in the world, twenty times loftier than Niagara and one of the world's most recent discoveries, is in the little known Gran Sabana region of southern Venezuela. Angel Falls, as

this giant is called, spouts from a cleft near the top of a half-mile-high mesa and leaps 2,648 feet to the bottom. A further plunge gives Angel Falls a total altitude of 3,212 feet—400 more than the combined drop of the world's second highest, Tugela Falls of South Africa.

# SPINNERS AND WEAVERS

## *Folk Who Practice Man's Oldest Handicrafts*

Spinning and weaving are two of the oldest industries of man, so that it is very surprising to find that until the eighteenth century the methods employed remained practically unchanged. When the machinery for the textile factories was invented, these two handicrafts began to die out in many countries, but in certain parts of the world where, for various reasons, factories have not appeared, spinning and weaving are still done by hand. Peoples of many races and living in every quarter of the globe are to-day still using spindles and distaffs and primitive looms very much the same as those employed by their forefathers many centuries ago, and the textile implements of one race differ in principle very little from those used by another.

**H**AVE you ever wondered—perhaps when you are holding a skein of wool on your hands while someone winds it into a ball—how it is that from the comparatively short hairs that make up the fleece of a sheep one thread yards and yards in length can be obtained? That is what spinning does. Spinning is the twisting together of a series of short threads and the drawing of them out to make one long, continuous thread. All silk does not need to be spun, because the thread provided by each silkworm is hundreds of yards long in its raw state, but wool, cotton, flax—all the other fibres from which man makes his cloth—must undergo the operation called spinning.

It is impossible to say when and where spinning first began, for it goes back to prehistoric days. We know this because spun thread or spinning implements have been found, together with certain remains of prehistoric man.

The oldest known form of spinning is with distaff and

spindle. Monuments of ancient Egypt, old Greek mythology and countless fables, writings and ballads, all bear testimony to their use. Yet, old as it is, the same method is practiced in many parts of the world to-day.

The distaff, sometimes called the rock, is in its simplest form a cleft stick about three feet long, on which the raw wool or flax is wound; the spindle is a pin a few inches long, having a nick at the small or upper end of it, to hold the thread, and

having a weight of some sort at the other end to make it hang and spin properly.

The spindle is threaded with a long piece of the twisted yarn and is then set twirling rapidly. While it revolves, the spinner draws out the fibres from the distaff that she holds under her left arm, and twists them together. As she twists and the hanging spindle spins, the fibres are wound round each other and drawn out—in other words, the yarn is spun. When so long a thread is



BLACK STAR

### JUST ONE OF HALF A MILLION

So many Bavarian country women make their linen that spinning is a major home industry.



ESTONIAN LEGATION

AT AN OLD SPINNING WHEEL in Saare (Oesel), an island athwart the Gulf of Riga between Estonia and Latvia. Because of the severe winters on the gulf, the lady of the house spent much of her time spinning yarn for her family's clothing. It is likely that after Estonia became part of the Soviet Union, Saare was made into a strong defense bastion.



REIC

**THE SHETLAND HOUSEWIFE** cards and spins the soft wool that she will later knit into warm garments. Carding consists in separating the fibres of bundles of wool, such as this woman has on her lap, and preparing them for spinning into thread. In the Shetlands every process in the making of the world-famed woolen shawls is done by hand.



## SPINNERS AND WEAVERS

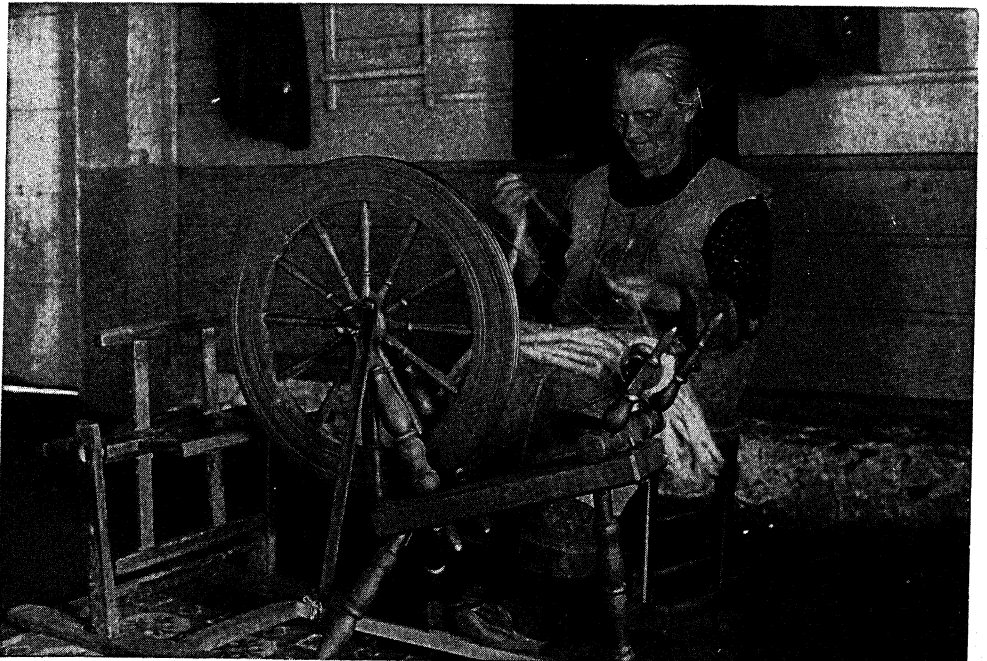
spun that the spindle nearly touches the ground, the spinner winds it around the spindle and starts again.

It is not known when the first spinning-wheel came into existence, but it was a great improvement on the distaff and spindle. Nuremberg and Brunswick, in Germany, both claim the invention, and there is a fourteenth-century manuscript in the British Museum that tells us of spinning-wheels. The early English monarchs, like the Eastern potentates of still earlier times, set great store on the art of spinning. For example, King Edward the Elder commanded his daughters to be taught the use of the distaff, and his father, Alfred the Great, referred in his will to the female portion of his family as the "spindle side."

The idea that exists in Germany, Rumania and elsewhere, that a bride should provide the household linen, shows that formerly no woman was considered fit for wifehood until she had spun and woven

for herself a complete set of bed, body and table linen. Hence an unmarried woman was, and still remains in law a spinster or spinner, though the custom of women weaving and spinning their own clothes has largely died out.

After the spinning comes the weaving—that is, the combining of single threads to make cloth. This is done by stretching a series of threads—called the warp—tightly over a frame, and crossing them with other threads—the weft or woof—which are passed over and under the warp. The frame on which this is done is a loom. The illustrations show us many different forms of primitive loom, all of which, however, follow the same principle. The first looms were very simple; but improvements were gradually made to them. An important one was the invention of the device called the heddle, which raises and lowers alternate threads of the warp to facilitate the movement of the weft. The weft was first wound into a ball, then



Canadian National Railways

### A HERITAGE FROM THE DAYS OF NEW FRANCE

One may still see old-fashioned spinning wheels in the farmhouses of the French Canadians in Quebec Province, Canada. The modern handicraft is a heritage from the days when Quebec was New France; and the skill in spinning and weaving has been kept alive by the people of today.

This spinner may use her yarn for making rugs or hand-woven fabrics.



© E. N. A.

# **DISTAFF AND TWIRLING SPINDLE IN THE HANDS OF AN OLD BRETON**

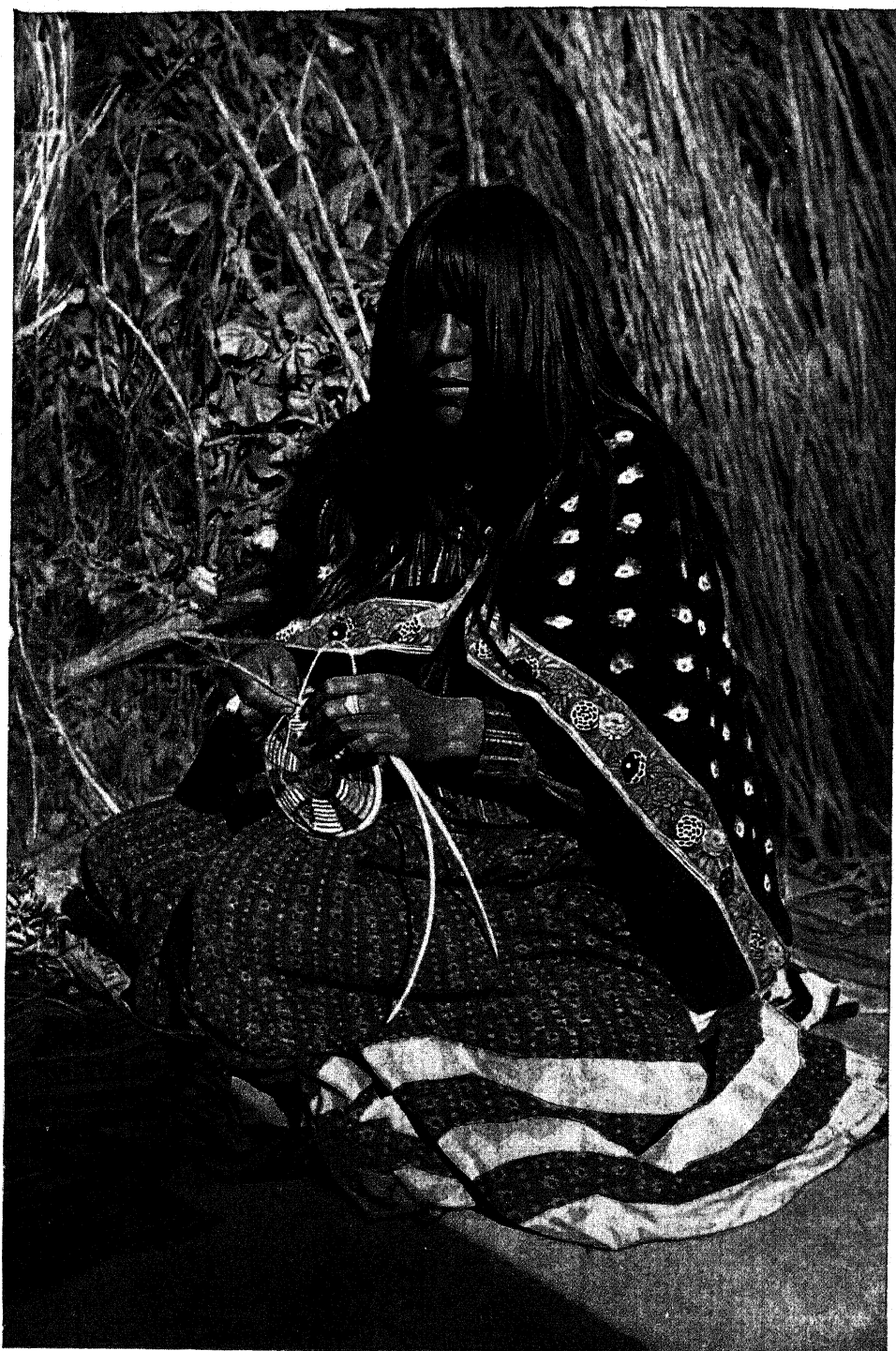
This is how all spinning was done before the spinning-wheel was invented. The spinner attaches the thread to the spindle, which she twists and then lets hang. It continues to twirl for a little time, and so, while the fibre is being drawn from the distaff by the weight of the spindle, the short fibres that compose the thread are being twisted together.

wound round a stick, then finally twisted round a spool which was enclosed in a torpedo-shaped shuttle.

So slowly, however, did man invent improvements in the methods of spinning and weaving, that as late as the middle of the eighteenth century the spinning-wheels and looms of our ancestors were

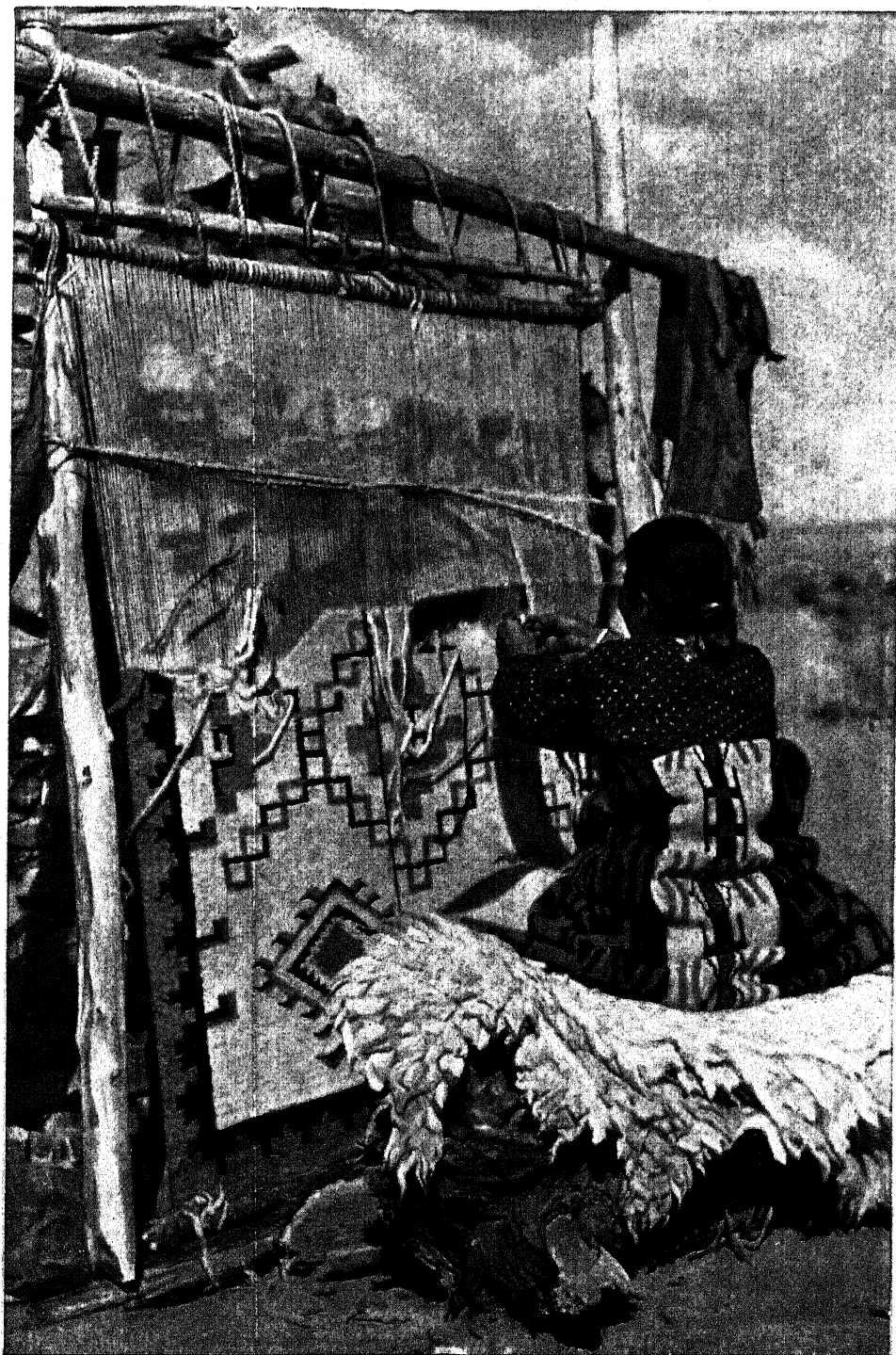
little different from those of their forefathers. Then in the eighteenth, nineteenth and twentieth centuries improvements came so fast that the industry was revolutionized.

We can understand the change if we first watch a spinning-wheel and a hand loom, and then visit a modern textile fac-



BROWN BROS

**PUERLO INDIANS.** the agricultural town-building tribes named from the Spanish word for village, live in communal houses and do basket-work, weaving and pottery. Their baskets are colored with dyes that the Indians make themselves. The one upon which the woman above is working will be small, but for the harvests the Zuniis make larger baskets.



AMERICAN MUSEUM OF NATURAL HISTORY

**NAVAHO WOMEN** of the sage-brush desert of Arizona and New Mexico patiently weave, on looms which they construct themselves, soft blankets of really artistic design and coloring. These they sell to traders and to visitors to the reservations on which they live. Most of the Navahos (Navajos), who are of Athabaskan stock, breed horses, goats and sheep





R. R. Rowe from Black Star

#### A YOUNG INDIAN WEAVER OF GUATEMALA

Her loom is a very primitive one, stretched taut by the back-rest, which is fastened around her own body, and also by the head "harness" that seems to be fastened to her braids. The weaver is really a part of her loom, and the arrangement is probably more comfortable than it appears to be. The colorful Guatemalan textiles carry out Indian designs.





EWING GALLOWAY

#### AN IRANIAN NOMAD SPINNING THE WALLS OF HER HOME

In Iran nomad tents are woven from the hair of goats. The women keep their spindles whirling, making the strong fiber that protects their families from the heat and cold of the desert.

tory and watch the marvelously intricate machinery that spins the short fibers of wool, cotton, silk or flax into long, continuous threads. Other wonderful machines shoot the shuttle holding the weft thread backward and forward between the threads of the warp, making hundreds of yards of material in an incredibly short time.

But although machinery and the need for increased production have killed many old handicrafts, the value of hand-loom weaving, whether as a pleasant home occupation or as an educational pursuit, will always exist. Fabrics turned out by a skilled and conscientious hand weaver

will invariably long outlast the cheaper cloths of modern machine production.

The "homespun" of Scotland, Ireland and Wales that we see in shop windows are sometimes real homespun made in the districts that give them their names. But often they are factory-made imitations, for manufacturers have been swift to turn out cloth imitating in appearance the old-fashioned cloth that would last for years. However good the machine-made "homespun" may be, they can never surpass the fabrics woven so carefully and conscientiously upon the hand looms from threads spun on the old spinning wheels, now almost curios for museums.



INDONESIAN INFORMATION OFFICE

#### IN INDONESIA: CREATING A PEACOCKS-AND-FLOWERS PATTERN

Though the hand loom is rather crude, the design of the cloth being woven is anything but primitive. The little girl watches in the hope of some day becoming as expert as her mother.

In many oriental lands hand-spinning and hand-weaving have not been superseded by machinery and are not likely to be. The hand-made carpets and rugs of the East are in great demand all over the world, not only because of their beauty of design, but because the care with which they are made and the beautiful colorings produced by the use of vegetable dyes, mean that these wares will outlast many a machine-made article, in the coloring of which mineral dyes have been used. In museums we may see examples of Persian and Turkish rugs and carpets two or three hundred years old, as freshly colored and beautiful as when they were made.

The looms of Europe and America supply China and India with an immense quantity of cheap cotton fabrics and woollens, but fortunately, the hand-loom plays an important part among the natives of those countries. Some of the most beautiful hand-made materials in the world come from China, and an old piece of Chinese tapestry will fetch a large price and Indian silks are prized for their quality and design. Yet the looms on which these lovely materials are made appear very crude and imperfect.

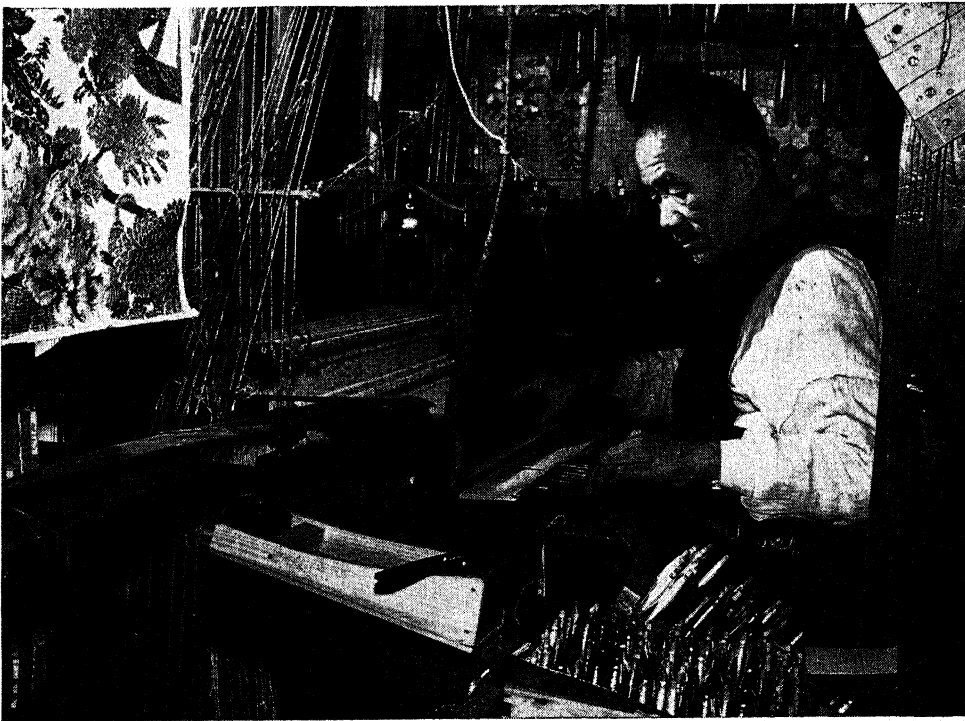
China and India are, however, the homes of old civilizations. Even the most primitive people have taught themselves



ORIENTAL INSTITUTE

### A PRESENT-DAY ARAB WOMAN USES AN ANCIENT SPINNING WHEEL

This scene is in Mosul, Iraq. Handicrafts are traditional, and the people still cling to their old methods. Our word muslin comes from Mosul, where this kind of cloth was first made.



AMERICAN PRESIDENT LINES

### JAPAN HAS KNOWN THE ART OF SILK WEAVING FOR CENTURIES

This Japanese weaver is making silk brocade in the Kawashima mill in Kyoto, a city that is noted for its art crafts, its silks and porcelains, its lacquer work and bronze.



BRITISH INFORMATION SERVICES

### NOVEL USE FOR AN OLD-TIME BICYCLE WHEEL

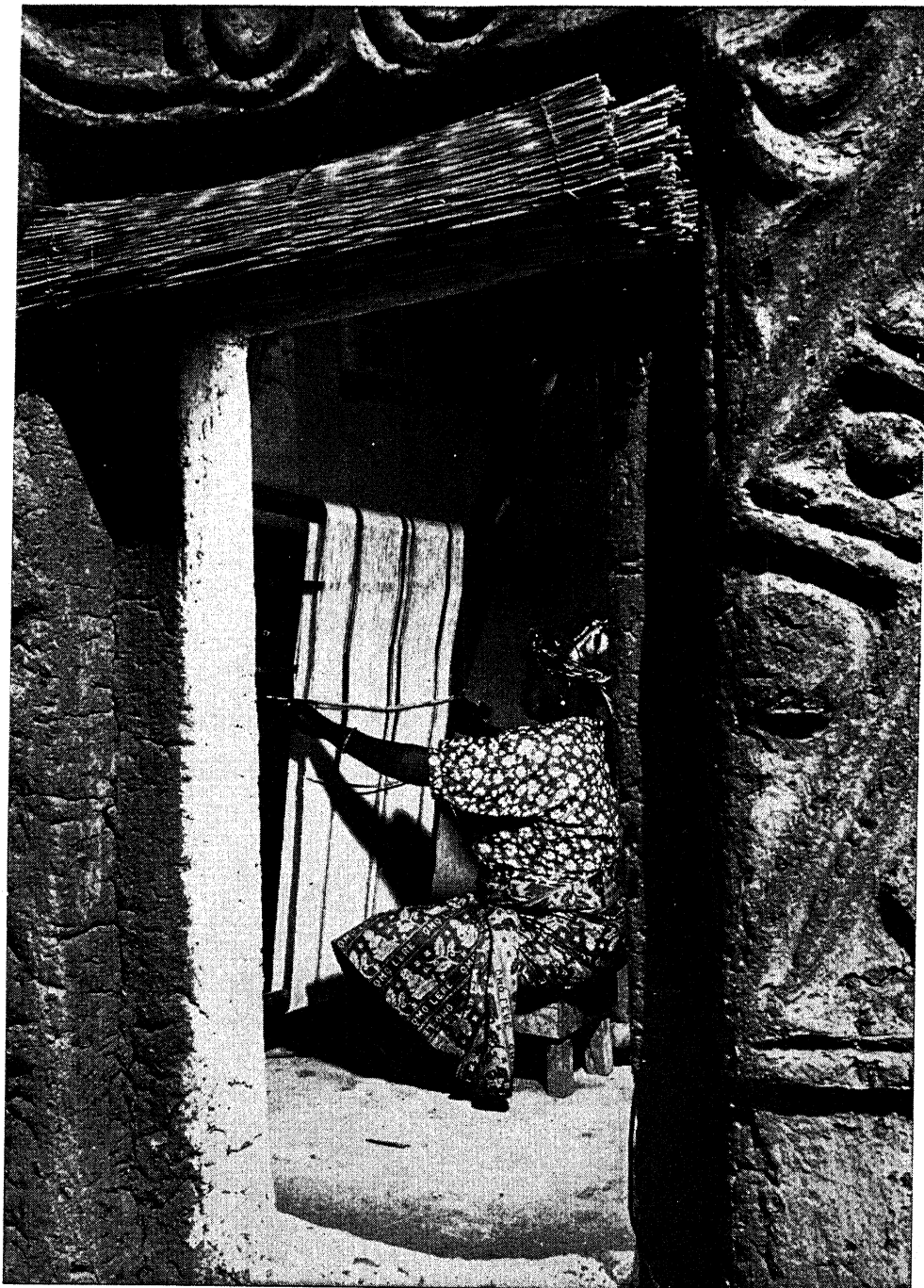
Bicycles many, many years ago had one tall wheel and a tiny one. The cyclist rode perilously high up, above the large wheel. When the safe and sane models that we know came into fashion, the older types disappeared from the roads; but strange uses were found for the various parts. You may still see, here and there in Nigeria, spinning wheels made of the huge wheels.

methods of spinning and weaving. In uncivilized lands, far from places where cheap fabrics and machine-made clothes can be procured, the women of the savage races, and even the men, spin animal or vegetable fibers with primitive distaff and spindle and erect curiously ingenious looms, on which they weave material to make what clothing they require.

The Indians of North America were not so skillful at spinning and weaving

as some other primitive peoples though Alaskan Indians wove blankets of goat's hair, and some of the Plains Indians made rough cloth of buffalo hair. The work of the Pueblo Indians as shown in the colored plate was the best.

Spinning and weaving, two of the oldest industries of mankind, have been practiced for centuries in similar ways by Christian and heathen, by black man and white, by civilized man and savage.



BRITISH INFORMATION SERVICES

### STRIPES ARE BELOVED BY MOSLEMS

Fabrics in bold stripes have been popular among the peoples of the Near East as far back as memory goes; and when Mohammed's followers spread their faith across northern Africa by fire and sword, they brought along also their ideas of beauty. As far south as Nigeria, on the Gulf of Guinea, where some of the natives are Moslems, striped textiles are favorites.

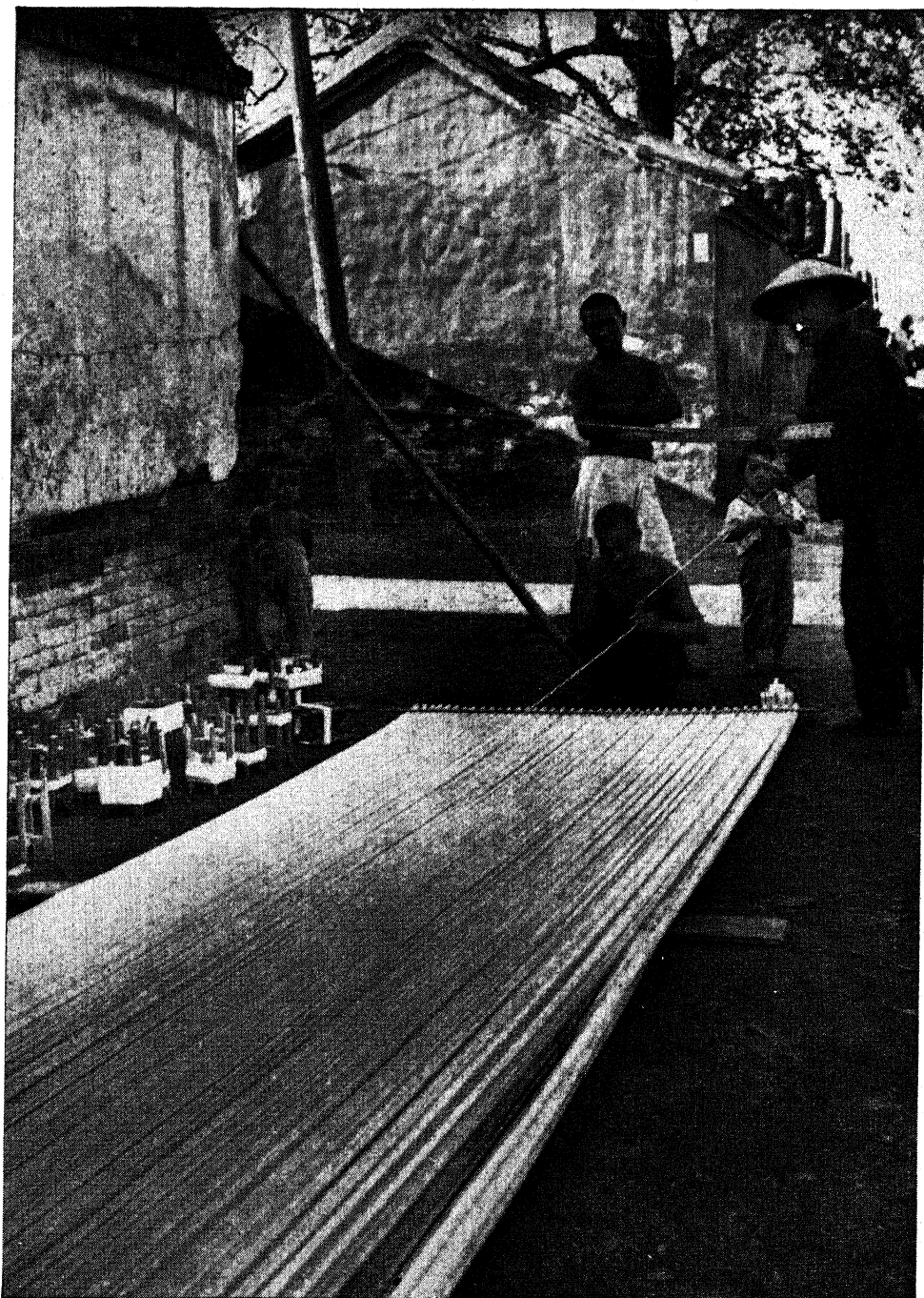




UNATIONS

#### FILIPINO MOUNTAIN WEAVERS PREPARING YARN FOR WEAVING

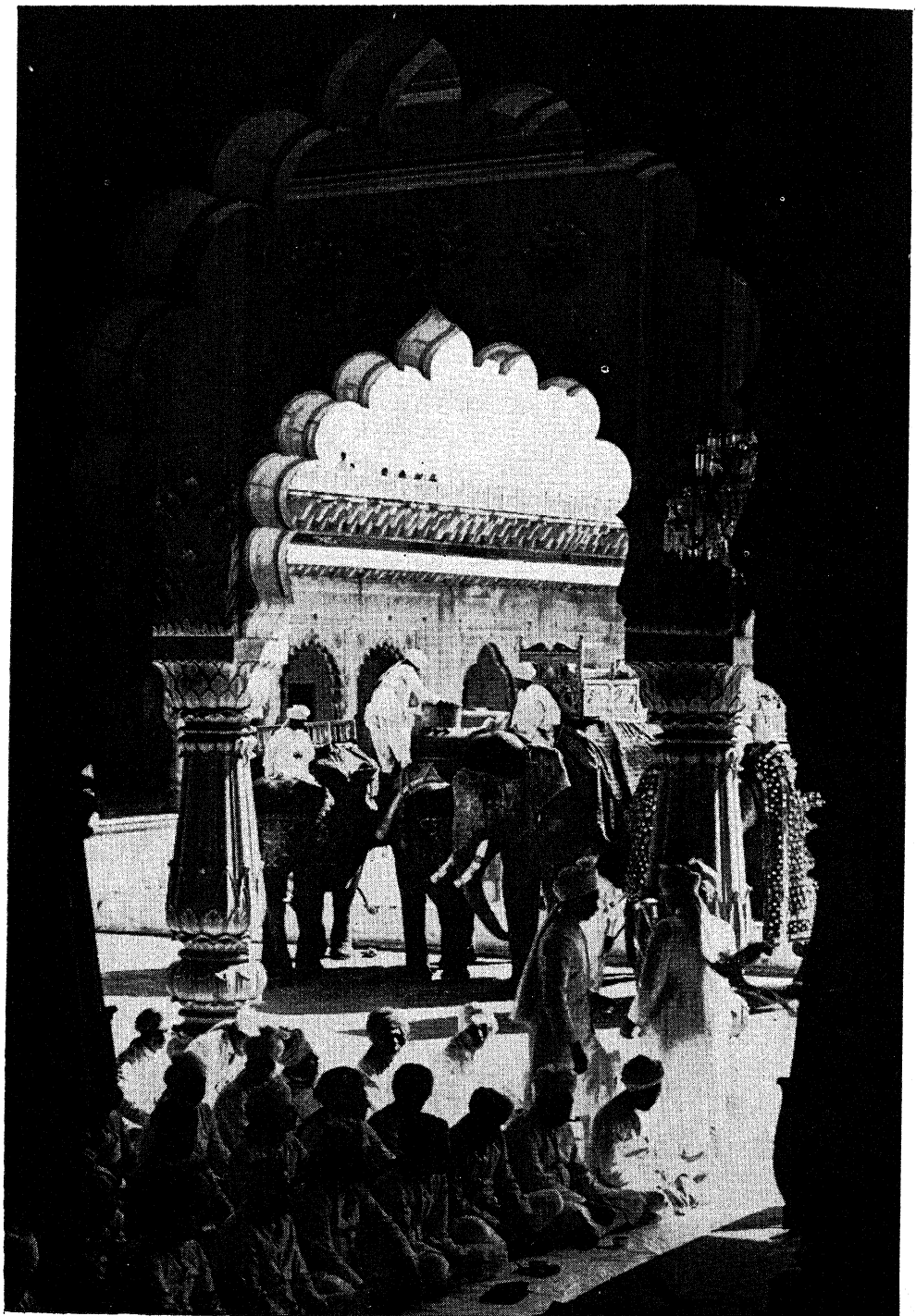
Women of the Igorot tribe in the Mountain Province of northern Luzon use an implement called a *tabafy* to wind yarn from spools resting at their feet. The skirts they are wearing were probably woven by the women themselves. Native weavers are gradually being introduced to improved weaving methods; as a result the quality of their cloth is improved.



BLACK STAR

#### STRETCHING THE WARP THREADS ON A HUGE LOOM IN CHINA

On this very simple though big loom, the warp threads are drawn taut between two beams (you can see only one of them here). The weft threads will be woven parallel to the beams. It is probable that only rather coarse cloth is woven on this loom, as it would seem to be extremely awkward to handle. The weaver must also have help in threading it.



PHILIP GENDREAU

### THE ELEPHANT SHARES IN INDIA'S RELIGIOUS AND SOCIAL LIFE

The beasts have carried visitors into the courtyard of a handsome building that serves as a meeting place for a religious durbar, or reception. The elephants will wait patiently.

# MY LORD THE ELEPHANT

## *His Marvelous Strength in Work or Play*

The elephant is the largest of all mammals except the whale, and for centuries the enormous strength of the Asiatic variety has been used by man in peace and war. Despite its size the elephant is a timid animal, and it is ludicrous to see one of these great beasts frightened by the yappings of a terrier, which it could send flying through the air with a flip of its trunk. In India, Burma and Siam the elephant can be seen to-day, as in the past, in gorgeous trappings, taking a prominent part in processions or busy at tasks suited to its strength and trained intelligence. African elephants, which are larger and less tractable, are seldom taught to work: they are hunted for the sake of the valuable ivory of their great tusks, which are sometimes over ten feet long.

**M**Y Lord the Elephant is the name given to those huge animals that are so characteristic of India. As the elephant strides proudly down the street, no one ventures to dispute his right of way. He towers above bullock-carts, carriages and camels.

With stately steps he solemnly advances, moving his great head from side to side. Only to his mahout, or driver, does he yield obedience—though the mahout himself looks insignificant as compared with the mighty creature whose course he directs.

India would lose half her romance if she lost her elephants. All the great princes and many of the lesser personages have as many elephants as they can afford—the largest and finest their wealth can purchase. Indian princes love display and elephants seem to have been especially created for pageants.

When a maharaja rides forth on some great occasion, his finest elephant is decorated from head to foot, his state howdah is of silver or gold, and beneath it is a splendid howdah-cloth of red velvet, embroidered with gold thread. This covers the elephant's back and hangs down on each side to within a foot or two of the ground. Anklets of gold, silver or ivory encircle the animal's feet; its trunk is painted and its forehead covered with jewels.

The great prince himself is dressed in the finest silks: his neck is encircled with gems and his turban flashes with diamonds. But in a motor car that prince would scarcely attract attention; it is the

elephant that makes him so magnificent. And as the great beast moves forward, with its curious up-and-down swaying gait and swinging trunk, it appears to appreciate the dignity of its position.

Some elephants are devoted to the service of the gods. Most of the temples of south India have their own sacred elephants that live within the temple courts, take part in the religious processions and receive gifts.

In some temples the elephants have the symbol of the god painted in white and red upon their trunks and foreheads. In the vast temple at Madura the sacred elephants are taught to beg from visitors. In one hall of great, carved pillars dwell two of these monsters in charge of a keeper. They kneel before each visitor and salute with their trunks. "Master, the elephants salaam to you," says their keeper. "They ask you to give them money, master." If the almsgiver drops a coin too small before them, they trumpet their disapproval and wave their trunks over his head in a threatening manner. One must donate coins sufficiently large for them to pick up with the finger-like tips of their trunks.

In the mountain town of Kandy, in Ceylon, there is a shrine known as the Temple of the Tooth, because the chief object of devotion is a relic said to be the tooth of Buddha. Once every year, at the Perahera festival, the golden casket containing the precious relic is borne through the town in a procession of elephants. It is carried in a gilt howdah on the back of a magnificent temple elephant,

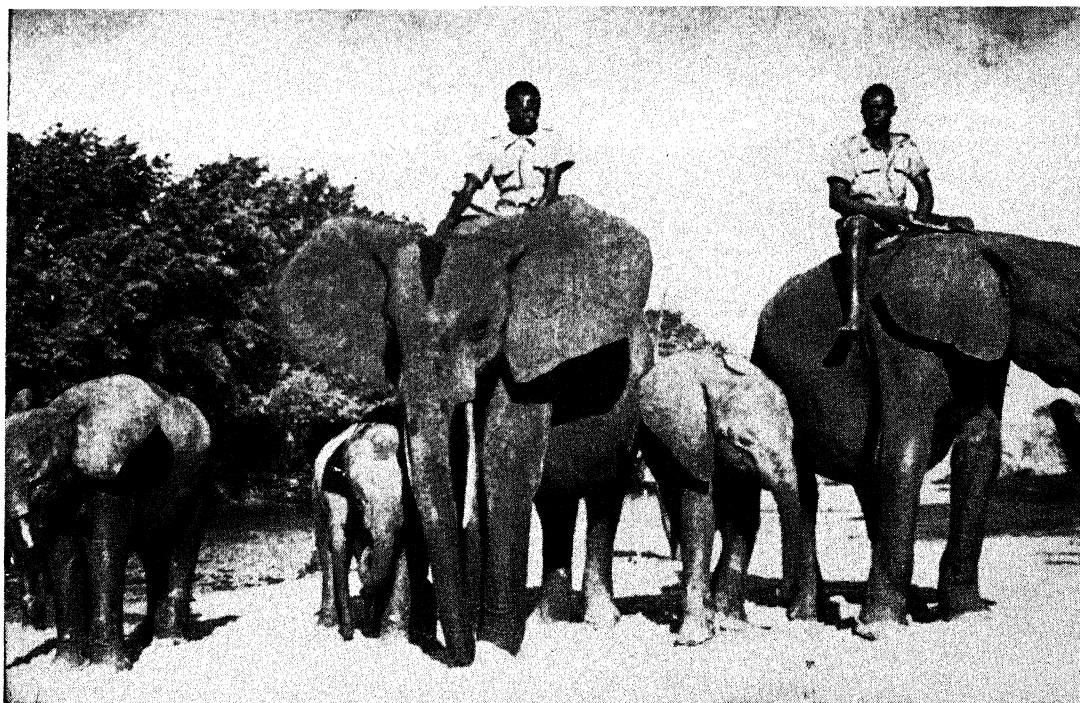


EWING GALLOWAY

#### MAKE A STEP, PLEASE

A good-natured elephant in Kandy, Ceylon, helps its driver to mount. Elephants' eyes are small, and their vision is poor, but they make up for this deficiency by having wonderfully acute senses of hearing and smell. The sturdy columns of legs end in broad feet with springy pads on the soles that cushion the beasts against the shock of their own weight.





AMERICAN MUSEUM OF NATURAL HISTORY

### ELEPHANT STUDENTS-IN-TRAINING

African elephants (you can recognize them by their great batwing ears) receive schooling for their life work at a government training camp. African elephants generally grow long tusks, the longest on record having been eleven feet, five and one-half inches. The heaviest tusk ever recorded was also from an African elephant. It weighed 226 pounds.

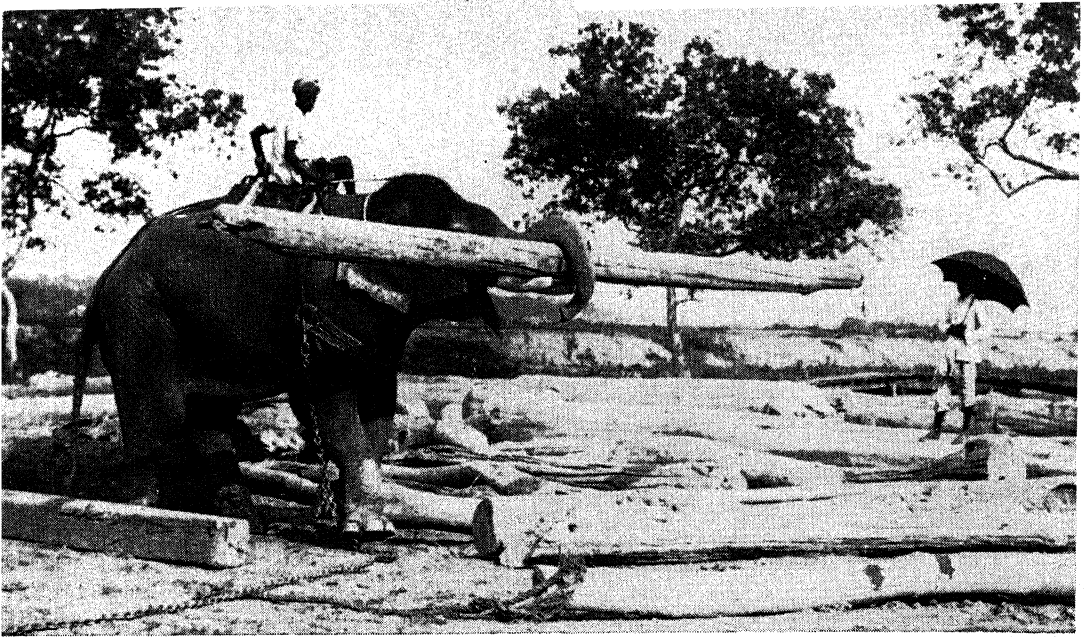
literally covered with decorations, and is shaded by a canopy supported on long poles carried by four attendants who walk beside the elephant. Two other fine elephants walk with the chief one, and many others follow behind, bearing the yellow-robed monks and the Kandyan chiefs.

White elephants, which are found in Burma and Siam, are of the same species as the ordinary Indian elephant, but are a pinkish-white in color. They are treated with reverence in Siam and Burma.

In past ages elephants have been used as a fighting force in battle. More than two thousand years ago great Indian kings kept their companies of war elephants. When Alexander the Great invaded India, three centuries before Christ, he crossed the Indus into the Punjab and on to Hydaspes (Jhelum) to find that the army of King Porus was strengthened with groups of elephants, placed at intervals along the battle-front, towering aloft like turrets above a city wall. The king himself fought and directed his army from the back of one of the great beasts.

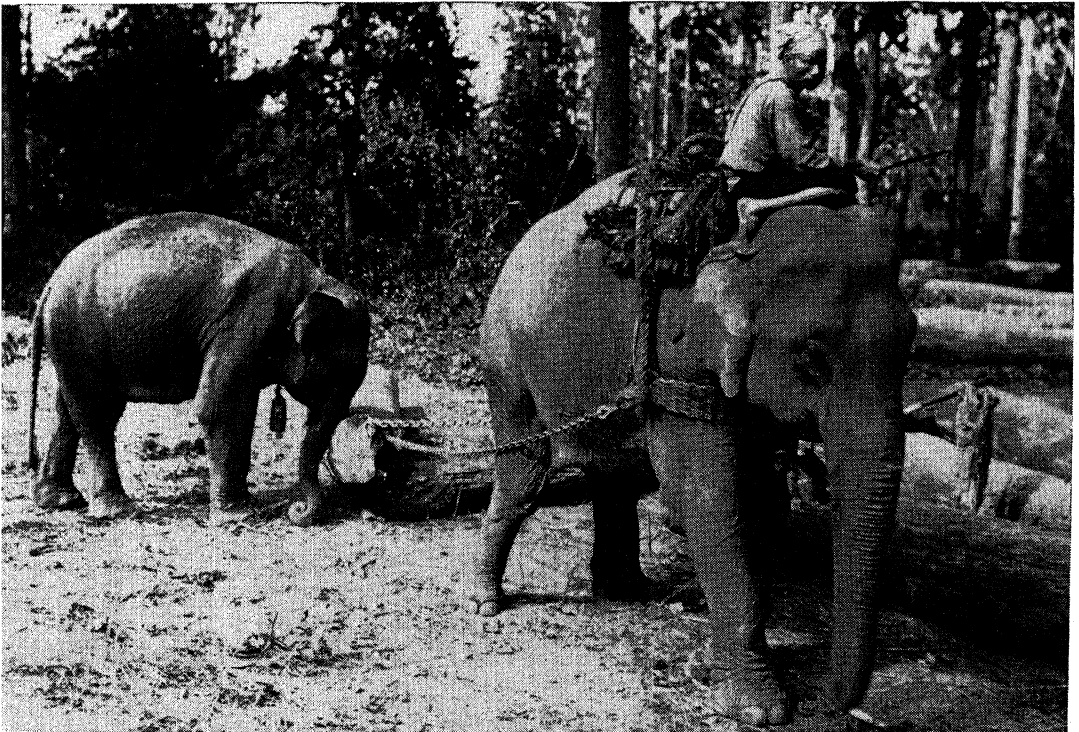
These elephants nearly spoiled Alexander's plans for, maddened by wounds, they broke through his ranks. But the mahouts lost control of the terrified animals; the Greeks re-formed and swept forward to victory.

The heavy wooden doors of old Indian castles are usually studded with huge iron spikes, pointing outward, only a few inches apart. They have been put there to resist an elephant charge. In days gone by war elephants were trained to attack the gates of a fortress with their heads. Such a charge, with the weight of the elephant's body behind it, would be like a battering-ram. Elephants are easily alarmed and then get out of control. In Hyderabad, for example, it has been found that motor cars terrify the elephants that hitherto have dominated the streets. It is told, however, that once an India elephant was feeding on the herbage of a valley near one of India's more remote railway lines when it perceived its first railway train. The snorting black monster came rushing toward it, the en-



#### HARNESSING THE TREMENDOUS STRENGTH OF THE ELEPHANT

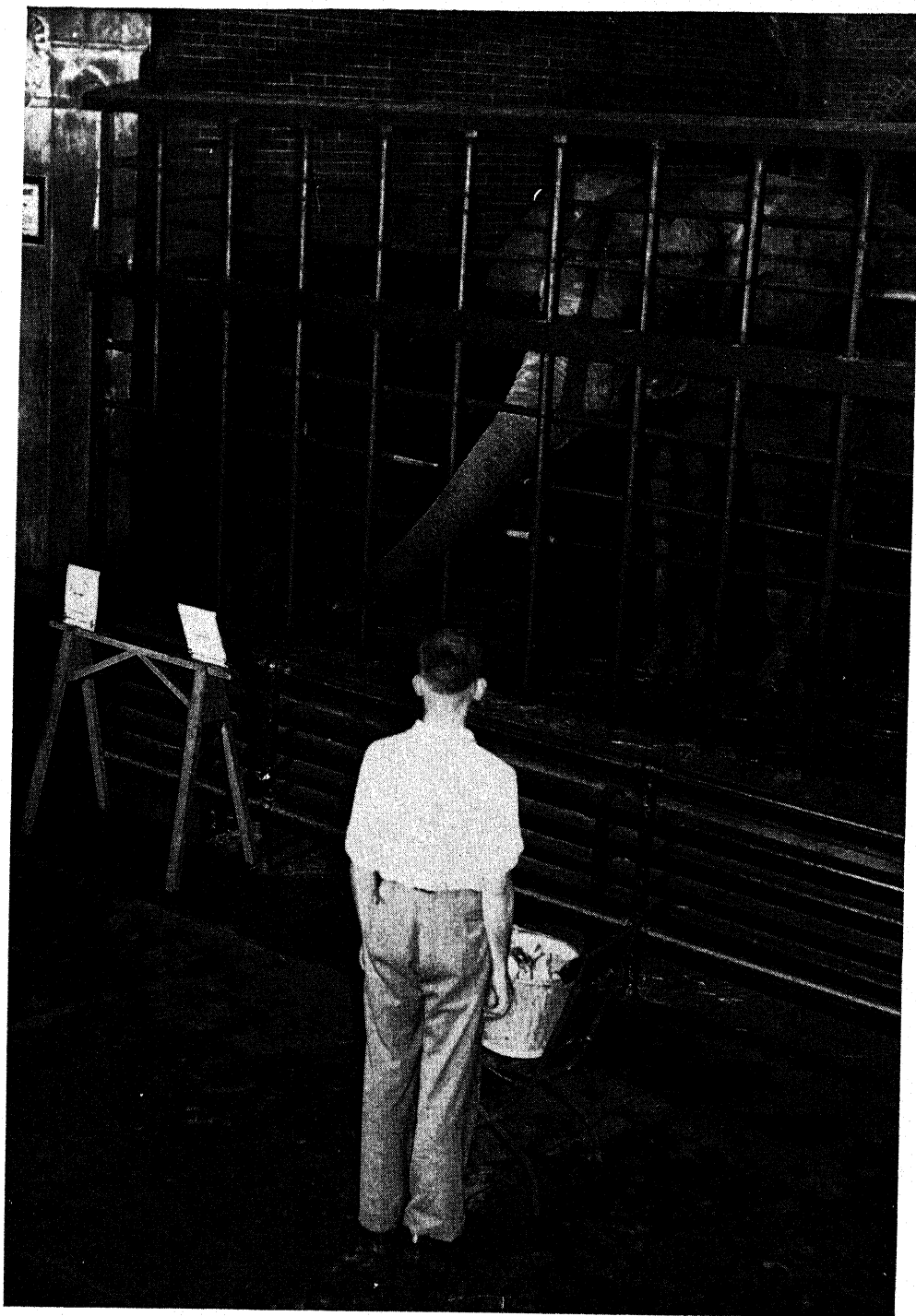
Teak is one of the hardest of woods, and these teak logs are extremely heavy. Yet the animal is able to lift a log with ease, using trunk and tusks. The scene is a Burmese forest.



PHOTOS, EWING GALLOWAY

#### PUSHING AND PULLING WITH LIVING BULLDOZERS

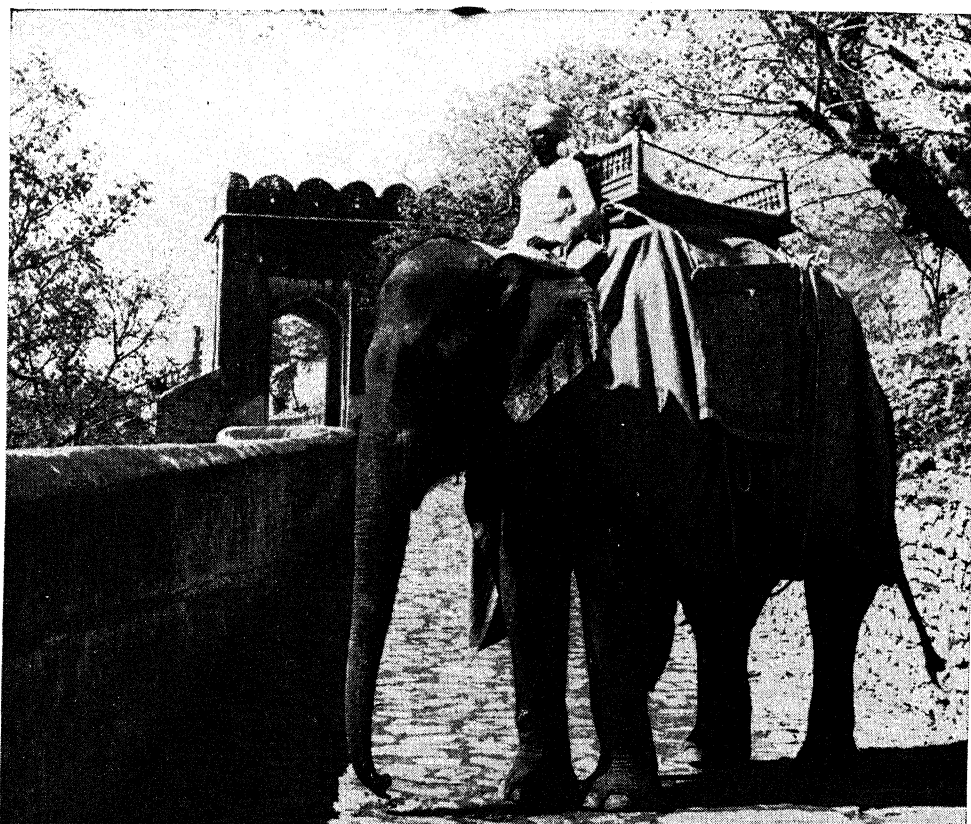
Teakwood lumbering in Burma is dependent on the massive animals for the strenuous labor necessary. They are so well trained that only the touch of a stick is needed to guide them.



NEW YORK ZOOLOGICAL SOCIETY

### TESTING THE INTELLIGENCE OF AN ELEPHANT, IN A ZOO

In front of the cage are cards in different colors. Blowing over one color, but not the other, is rewarded with a choice bit of food. Test is how soon the animal learns to choose.



PHILIP GENDREAU

#### SIGHT-SEEING IN ROYAL STYLE IN JAIPUR, INDIA

In place of the more usual howdah, or covered pavilion, this steed carries a sort of railed bench on his back. In any case it is a pleasantly lofty perch from which to view the landscape.

gineer's whistle sounding what must have been a challenge to the pachyderm. This infuriated the great beast: nothing he had ever met had been his superior in brute strength; he determined to meet the train head-on and put it to a tug-of-war. On came the creature of the gleaming iron rails; on came the elephant, snorting his wrath. The engineer applied the emergency brakes; the elephant did not. Of course his thick skull didn't last one second against the drive of the engine. The locomotive was derailed—but the elephant was done for. Buffalo are said to have behaved the same way in America.

Since early times monarchs have used elephants for sport. In the Roman amphitheatres elephants engaged in mortal combat with one another to amuse the crowds of the Imperial City. The Gaekwar of Baroda, one of the most powerful of In-

dian princes, still has elephant fights in an arena in his palace grounds.

The huge gladiators fight with blunted tusks, so as not to do one another serious harm. With their mahouts to guide them, they engage in a giant tussle of strength, butting with their mighty heads and opposing strength to strength. Nowadays it is little more than a friendly contest for a decidedly heavy-weight championship.

For the royal sport of tiger-hunting the Indian princes and their European guests usually ride on elephants trained for the purpose. The hunters sit in specially constructed howdahs that enable them to fire in every direction.

Left to itself, an elephant will seldom face a tiger; but guided by its mahout and protected by the rifles of the hunters on its back, it enters into the chase with loud trumpeting. It is remarkable how, by

## MY LORD THE ELEPHANT

training, the elephant's natural timidity in the presence of its enemy, the tiger, may be overcome.

Many elephants have to work hard for their daily rice-ball and cut grass. In one of the great teak forests where the lumbermen are at work watch an elephant as he draws a huge log to the river. It is obviously child's play to him. Notice, however, that he does not carry the logs, he pulls them with the aid of a rope fastened around his body. In the timber yards at Rangoon the trained elephants stack the timber. They lift the heavy balks of teak, carry them across the yard and stack them in piles—carefully putting them straight.

Strange tales are told of these timber-yard elephants and their intelligence. It is said that one evening, as a driver was about to finish removing a number of logs, the bell rang for work to cease. There was only one more log to move, and the man thought he might as well finish the job. His elephant, however,

struggled in vain with that last log, and the driver called to his aid another elephant that was passing on its way to the stables.

The two of them failed, and a third elephant was summoned. Finding the task so unexpectedly difficult, the driver now resolved to leave it until the morrow. Next morning the first elephant got his tusks under the log and easily carried it away without assistance. He had known that when the bell rang it was time to stop work.

Elephants do not lift heavy weights with the trunk, a far too delicate and precious an instrument to risk in that way. The elephant may put his trunk around a man and lift him, or he may use it to break off the slender branches of a tree. He may turn his trunk into a step-ladder to enable his mahout to climb up to his neck. But he will not lift a balk of timber with it. He will carry logs on his tusks, or even in his mouth, but not with his trunk. Indeed, the trunk is



CHARLES PHELPS CUSHING

IN MEMORY OF HARD-WORKING "OLD BET," SOMERS, NEW YORK

The pillar honors the first circus elephant that Hachaliah Bailey took on tour with other animals in 1815. "Old Bet" was so successful that the hotel was built with the profits.





STANDARD OIL CO. (N.J.)

#### A DEMONSTRATION THAT ELEPHANT'S WORK IS NEVER DONE

A circus elephant works overtime. The beast is pulling a truck out of a rut in which it became stuck while the circus was setting up its equipment in an open field in Maryland.



PRESS INF. BUR., GOVT. OF INDIA

#### INDIAN ELEPHANTS TURN THEIR ATTENTION TO FARMING

"Elephant power" replaces horse power. Unable to afford gasoline-run tractors, the people of India use elephants to help them with their plowing. A full-grown elephant shows the practicability of the idea by a demonstration held in the Nainital Terai Forest area near Lalkua. The plow is attached to a harness on the elephant's back by a stout metal chain.

## MY LORD THE ELEPHANT

so delicate that an elephant can pick up a coin with the finger-like muscle at its tip. He can also knot the end of it to deliver a blow, though his kick is even more effective. He uses his trunk for conveying food and water to his mouth and for squirting water or dust over his body.

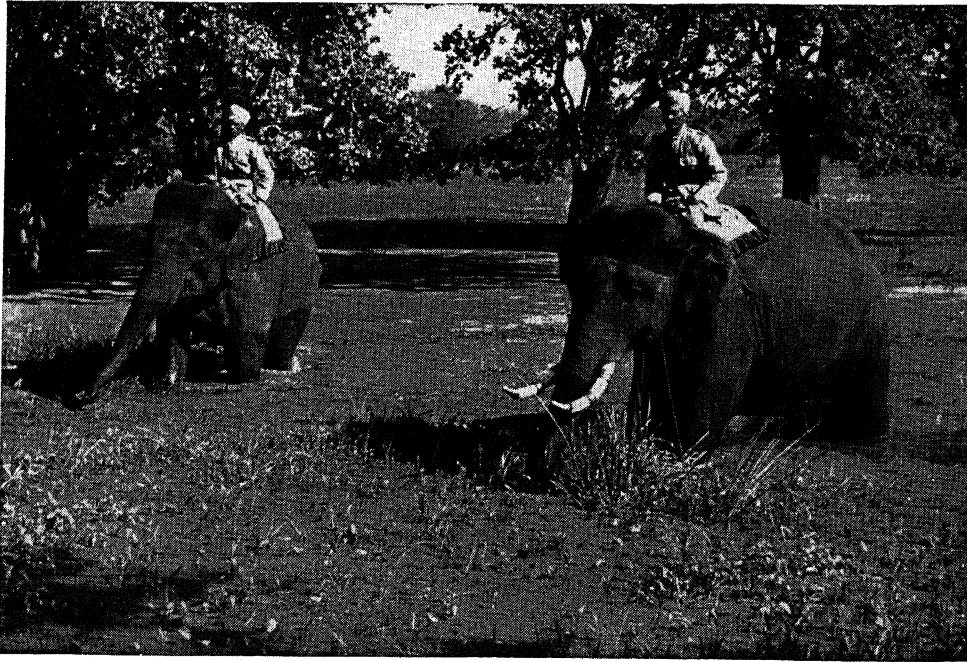
The tusks of a full-grown male elephant are frequently five or six feet long, and rare specimens have measured eight or ten. To the elephant, tusks are useful not alone for lifting objects but as weapons. African elephants use them as instruments for even digging up edible roots.

In Africa, elephants are killed for their ivory, and are seldom captured and trained. The sportsman, rifle in hand, hunts them on foot. Guided by African hunters, he creeps through the undergrowth of the forest toward some spot where a herd or a stray rogue is believed

to be. The greatest care is necessary, for a mistake may cost the sportsman his life. The monster can crash through the undergrowth at vast speed, smashing the creepers before him like cotton threads. To be caught by that waving trunk, or on those gleaming tusks, is almost certain death.

The African elephant is larger than the Indian, being frequently ten or eleven feet high. It can charge at a greater speed and maintain it for a longer distance than its Asiatic cousins.

It is said that for three hundred yards or so it can run at a speed equal to fifteen miles an hour, and for a full hour can keep up a pace of ten miles, as against the Indian elephant's six or eight. As a rule, too, its tusks are larger and usually both males and females possess them. The great difference between African and Asiatic elephants, however, is that the African has much larger ears.



PHILIP GENDREAU

### ELEPHANTS IN MARSH AT BHARATPUR, INDIA, FOR A DUCK SHOOT

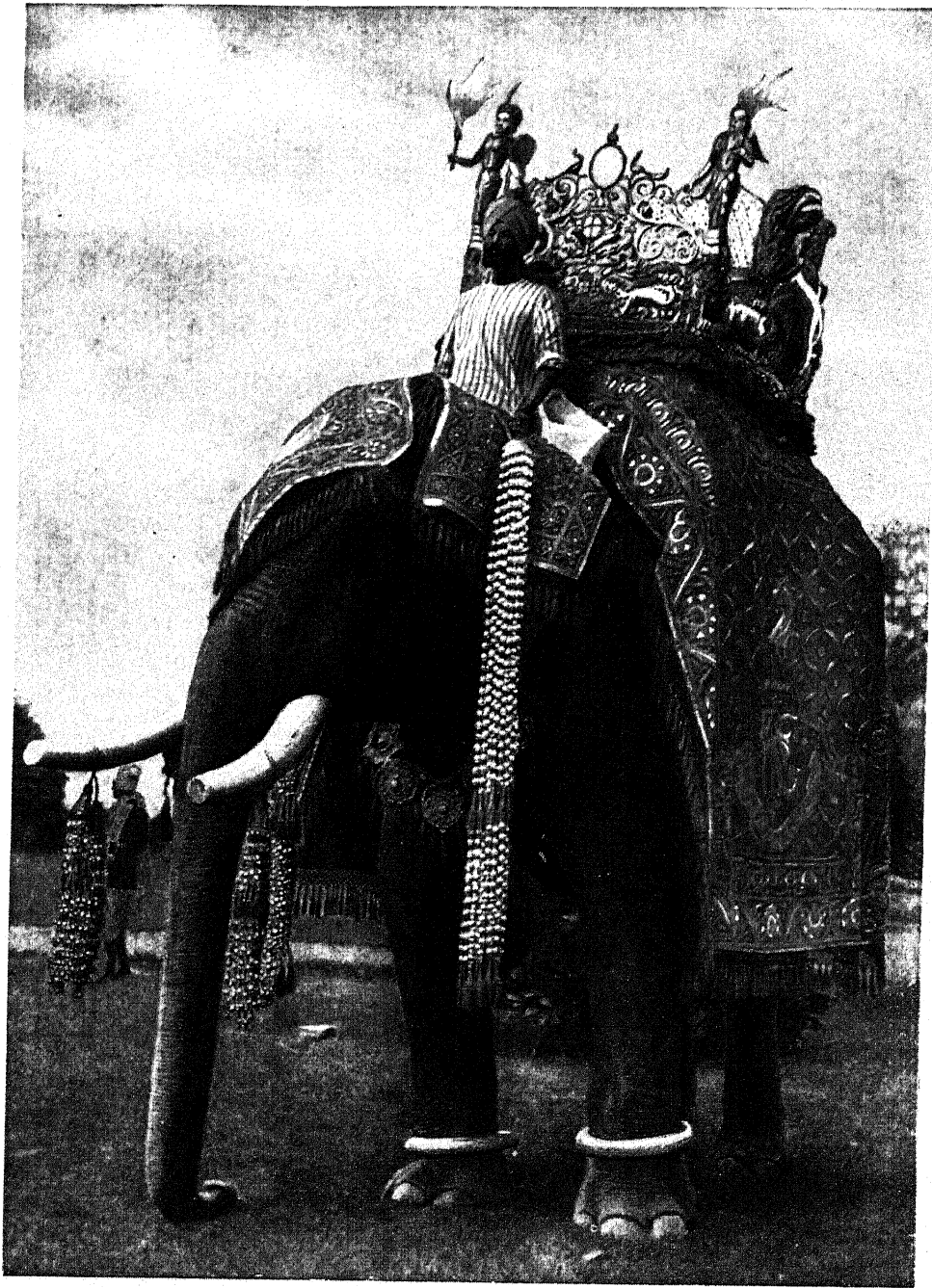
The Indian elephant differs from his African counterpart in having smaller ears and eyes, a longer head and a more concave forehead. He also has five rather than four toes on his hind feet. More gentle and teachable than his somewhat savage African brother, he can be trained to perform all sorts of heavy labor, as well as to become a skilled circus performer.



GAEKWAR'S ELEPHANTS parade through Baroda, the crowded capital of the once important princely state of Baroda. With its good schools and efficient government, Baroda was one of the most modern of the small princedom. After India gained her independence, Baroda became

a part of the state of Bombay. The maharajah, a member of the Gaekwar family, which had ruled for more than a century, lost all his governing powers. The Indian Government granted him a pension and allowed him to continue living in some splendor in his palace.

© REALISTIC TRAVELS



BARBER

**IN GORGEOUS TRAPPINGS** of scarlet and gold, with tassels of pearls hanging over ears and from blunted tusks, a necklace of gold plates and anklets of ivory, and an ornate silver howdah on his back, this Bengali elephant is a mount fit for a king. Though the usual height of an Asiatic elephant is eight or nine feet at the shoulder, this one—a veritable giant among pachyderms—is nearly twelve. An elephant usually weighs from two to three tons, and, even in captivity, has been known to live for a hundred years.



## MY LORD THE ELEPHANT

In certain regions of West Africa there lives a race of pigmy elephants, which, even when full grown, are not very much more than five feet in height. The ears of these little elephants are not so crinkled as those of the ordinary African elephant. They may be tamed and trained to draw carts. They are certainly cheaper to feed than their big brothers.

The intelligence of My Lord the Elephant is a matter of dispute. It might be imagined that so huge an animal must have a correspondingly huge brain. Indian idols accordingly represent the Hindu

god of wisdom as having the head of a pachyderm. One must remember, however, that actually the animal's brain is small in proportion to its size. The powerful brutes are trained by the simple method of being awarded with extra food for performing what is required of them. Circus elephants that learn to stand on their hind legs are first shown the posture desired by being hoisted, so to speak, into position.

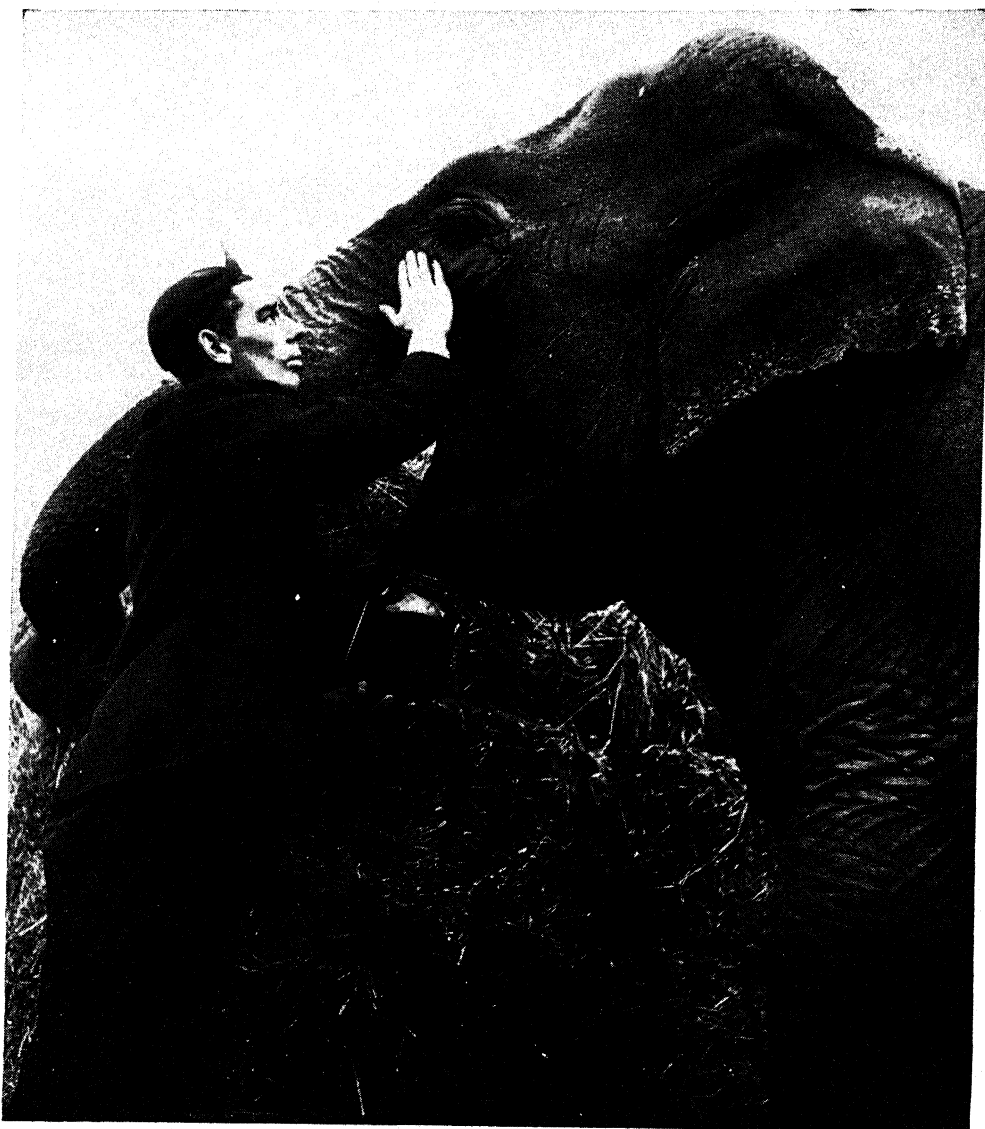
Elephants are terrifically afraid of thunder and lightning. One of the times of supreme danger under the white tops

**CIRCUS ELEPHANTS** are schooled for their act in winter quarters. The trainer exercises a great deal of patience and understanding as he teaches the huge animals to perform stunts.

STANDARD OIL CO. (N. J.)







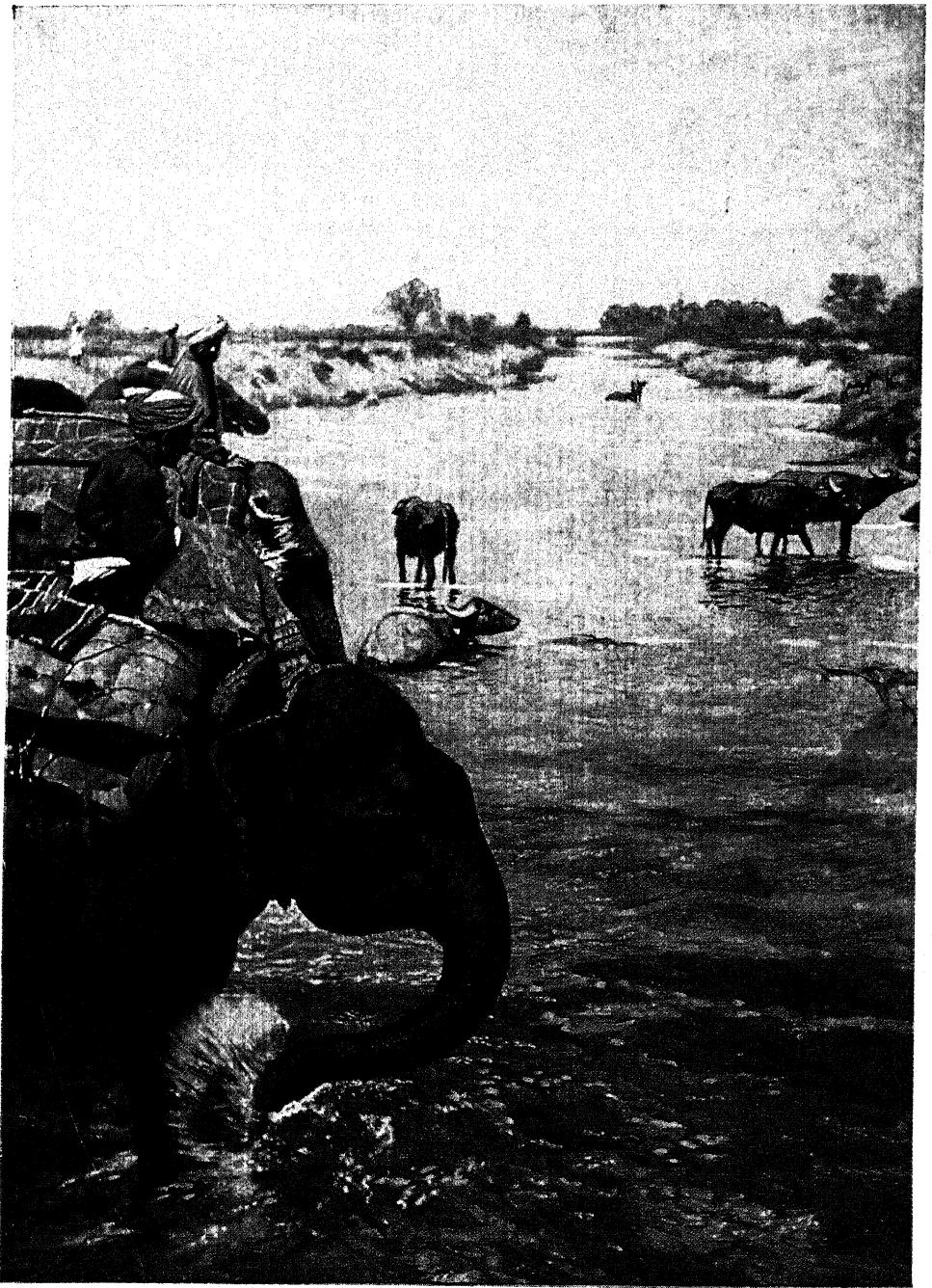
STANDARD OIL CO. (N. J.)

A "BULL MAN" rubs vaseline onto the skin around an elephant's eyes to keep it from cracking. Plenty of food, water and good care are the reward of faithful circus animals.

of the circus is when the sounds of a storm break in on the rhythm of the steam calliope and the smell of electricity pierces the peanut-laden atmosphere of the sawdust ring. The gigantic gray beasts, but a moment before placidly posing on barrels, eating from plates and bottles ranged on a human table or pushing the red and gold tiger cage-wagons to their places in the arena, now have to be handled with diplomacy. But there have been cases on

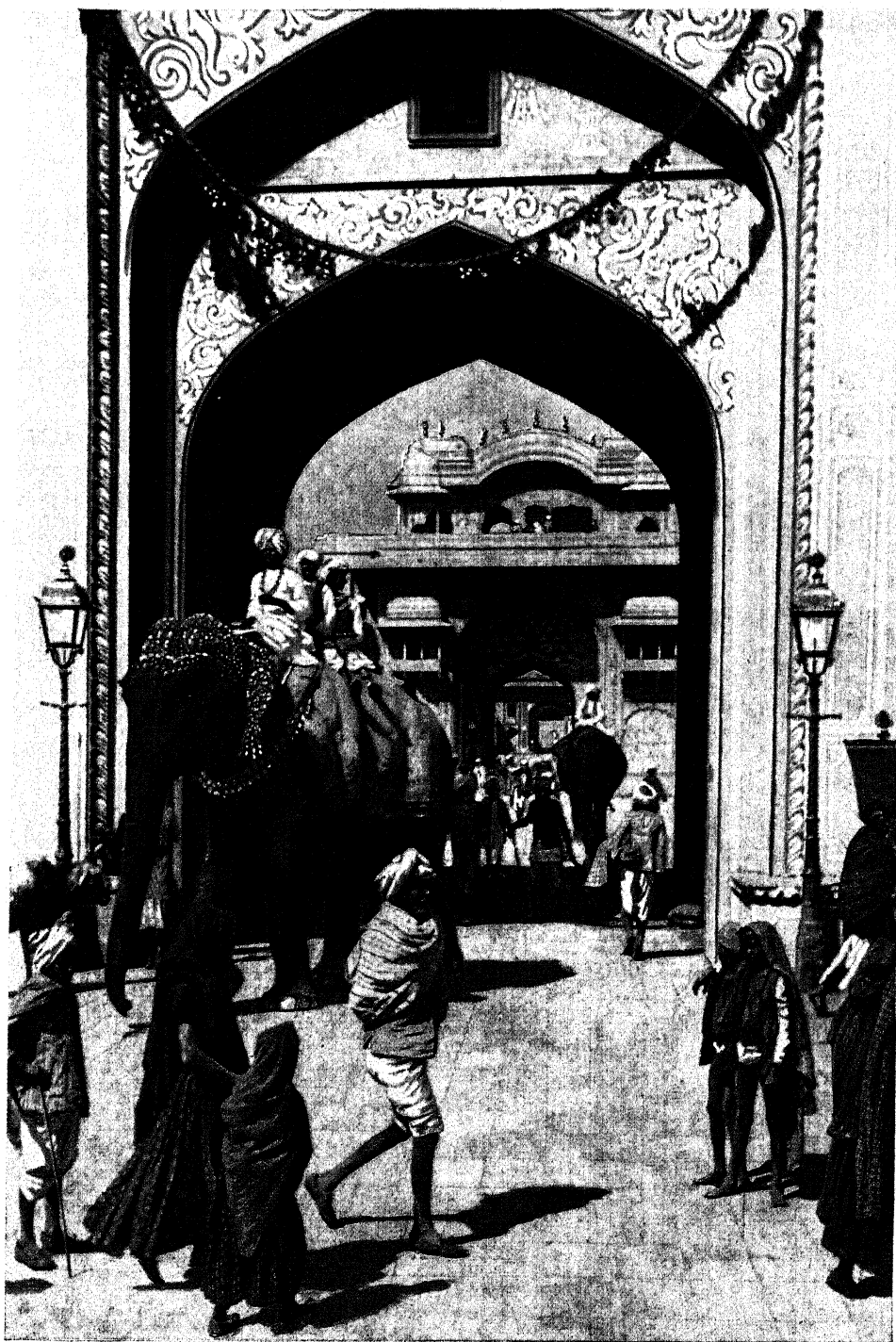
record where, despite the confidence-inspiring tones of their keepers, they make a bolt for the open—even though it takes them straight through guy ropes and orchestra seats—as far as they can go before the storm is over.

One of the greatest treats that can be given them is a chance to go swimming. The chunky fellows will squirt trunkfuls of water at one another and meet the oncoming waves with snorts of enjoyment.



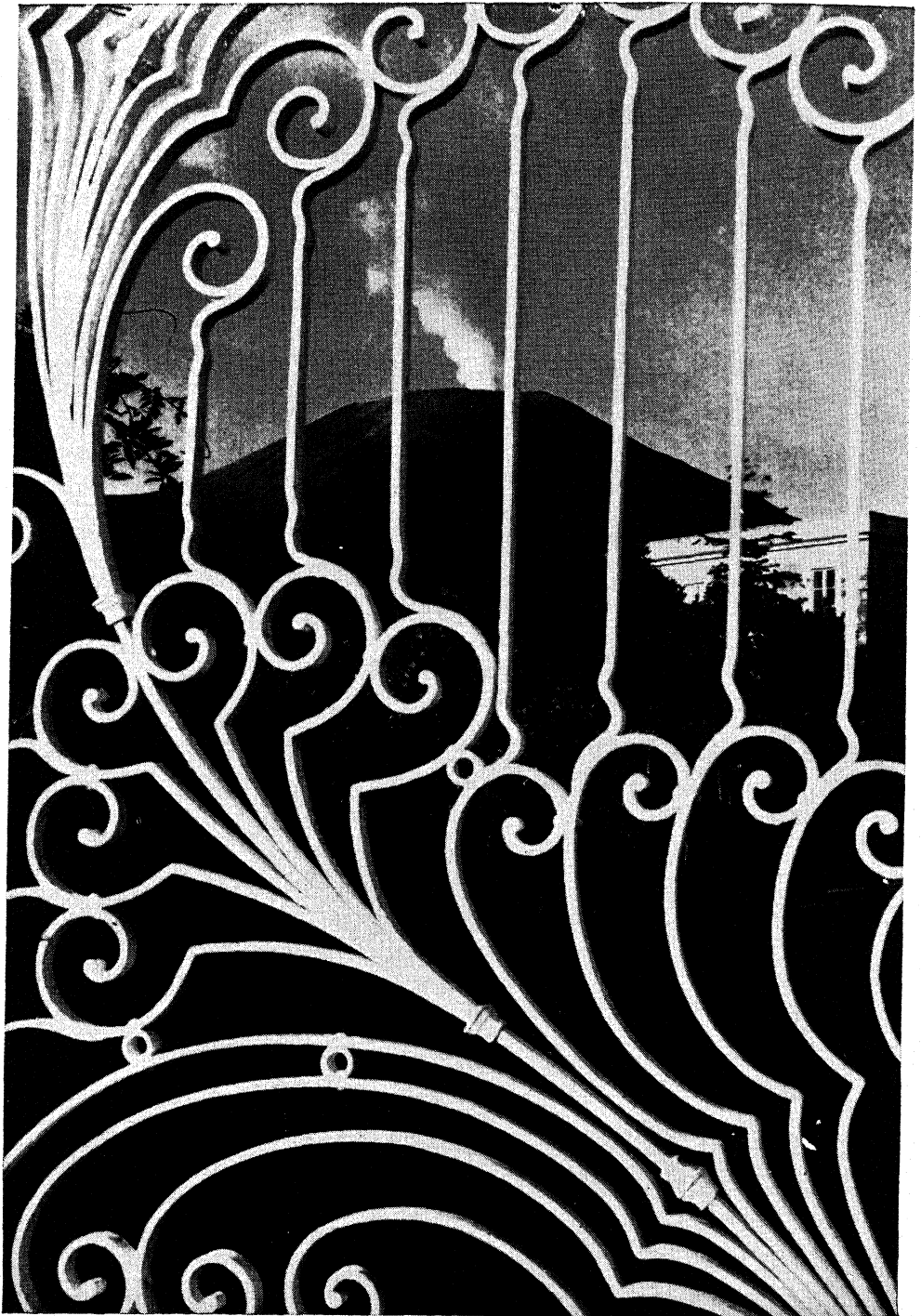
LONG

**ASIATIC ELEPHANTS**, dwellers in the humid jungle forests, lovers of warmth and mud, are never so happy as when they are in the river. With their trunks they draw up the cool water and either squirt it down their throats or pour it over their parched skins. They will also hose down any man or beast that has annoyed them. Elephants are good swimmers.



© UNDERWOOD & UNDERWOOD

**FROM THE STABLES** of the former ruler of Jaipur come two elephants to take their daily exercise. Throughout India these dignified pachyderms were once regarded as the proper mounts for royalty, though their stiff-legged gait is anything but comfortable to one accustomed to riding on horseback. The great beasts can, however, carry enormous weights.



PHILIP GENDREAU

**A VIEW OF VESUVIUS THROUGH AN ORNATE GATEWAY IN NAPLES**

Vesuvius, which savagely destroyed Pompeii, Stabiae and Heraculaneum in 79 A.D., has mellowed with the centuries. It now benignly sprinkles ashes that enrich the surrounding farmlands.

# THE FIRE MOUNTAINS

## *How Volcanoes Act as the Earth's Safety Valves*

Gases and steam, generated by the terrific heat in the interior of the earth, exert a tremendous pressure upon its surface. When this pressure becomes too great, a safety valve in the form of a volcano, allows the vapors to escape like the steam of a locomotive. Unfortunately if a city or a village is close to the mountain it may be overwhelmed by the streams of molten lava and the clouds of dust that accompany these eruptions. When Stromboli or Vesuvius send up their plumes of smoke by day, or the glow of their hidden fires which light the sky by night, one ponders whether the energy of these volcanoes might not somehow be turned to use by man, instead of being a continual menace to the safety of both lives and property in their neighborhood.

**V**OLCANOES are openings in the earth's crust out of which, from time to time, steam, tuff (ashes), molten rocks and lava, and sometimes mud are thrown. They are usually found in those parts of the world where mountains are still in process of being made, and where the rocks have undergone what is known as folding and fracture. We find most evidence of such volcanic rock along the ranges of the Pacific islands, where the mountains run near the borders of the ocean basins. The name was originally associated with Vulcan, the god of fire of Roman mythology. Geologists differ as to the source of the heat.

A volcano is generally shaped like a cone with the top cut off. This cone is gradually formed by the discharge of lava and rocks. In its centre there is a crater, at the bottom of which is the vent through which the lava flows. While a volcano is active this hole is kept open by the force of the vapors that it emits; but when the volcano remains quiet for some time the hole may become closed by rocks falling from the walls of the crater or by the hardening of the lava near by. Then when the volcano erupts again, a new crater may be made through some weak spot in the side of the mountain, so that it is never certain on what part of it the explosion will take place.

Stromboli, a volcano on the Lipari Islands in the Mediterranean, erupts at fairly regular intervals. In 1883 there was a disturbance at Krakatoa, an East Indian island, that seemed extraordinarily sudden, but was really the result of a state

of unrest which had been going on below the surface of the earth for months or even years.

As men have learned more about the nature of volcanoes, it has become easier to interpret the signs by which a volcano gives warning of eruption. What are known as local earthquakes take place—tremors of the earth's surface that are confined to the volcano itself or the land near it. These earthquakes are often caused by a crack in the depths of the crater, such as would be formed by a rock giving way under severe strain. There have been a number of cases in which earthquakes have begun to occur years before the eruption took place. Earthquakes of this kind caused great damage in Herculaneum and Pompeii as much as sixteen years before the disastrous eruption of Mount Vesuvius, 79 A.D.

Other warnings given by volcanoes are roaring and rumbling sounds below the earth and the heating of the water in neighboring springs, which often rapidly decrease in volume at the same time. In the case of volcanoes capped with snow, the sudden heating of the crest of the mountain melts the snow and causes heavy avalanches.

Many eruptions have taken place without warning signs. This was the case with the terrible eruption of Mont Pelée, on the island of Martinique in the West Indies, which destroyed the town of St. Pierre and thirty thousand people. On the side of the mountain there is a great basin called Etang Sec in which the mud from the volcano mixed with water. On

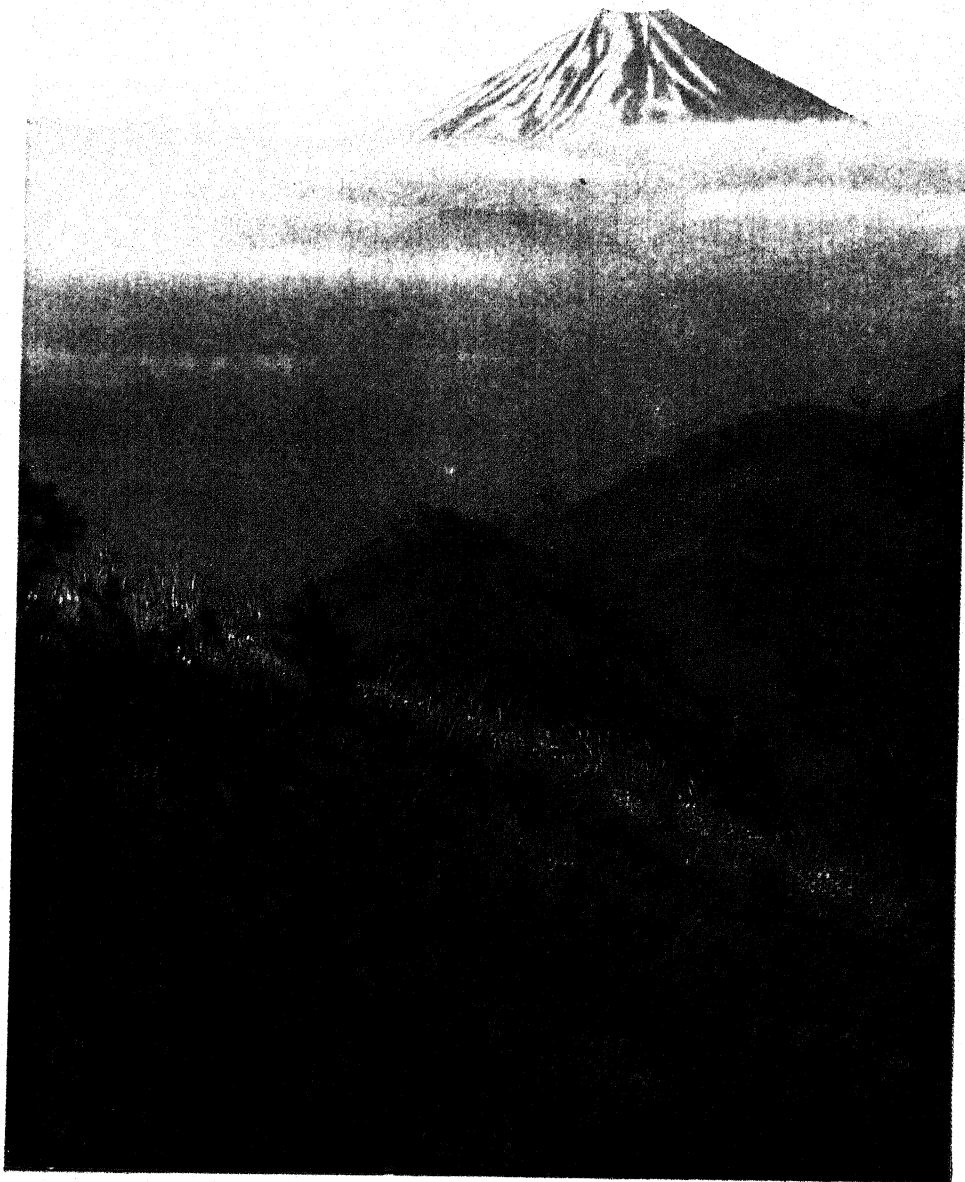




© EWING GALLOWAY

**THE ISLAND OF JAVA** contains more active volcanoes for its size than any other place in the world today. In the above photograph, we see a group in the eastern part of the island. From the crater of Bromo, on the left, sulfurous wreaths of steam are issuing. A puff of vapor also

risers from high Semeru in the background—another of Java's fourteen active volcanoes. Over a hundred craters are dormant. Some contain deep lakes, high under the sky. The soil is exceptionally fertile owing chiefly to the deep decay of the rocks, the abundant rainfall and the tropical climate.



EDWARDES

**FUJIYAMA** (Fuji), which we see rising above the mists of morning, is the sacred mountain of Japan, to which pilgrimages are made every summer. In 1707 its entire summit burst into flame, lava flowed and ashes fell even in Yedo (Tokyo), sixty miles away. Usually there are neither sulfuric exhalations nor bursts of steam, but it is not certainly extinct.



AMERICAN PRESIDENT LINES

#### LAKE TAAL AND A VOLCANO WITHIN A VOLCANO ON LUZON ISLAND

Lake Taal in the Philippines is a fresh-water lake ninety-four miles square within the crater of a prehistoric volcano. The volcano Taal rises from a small island in the center of the lake.

May 5, 1902, the black, boiling mud escaped from the basin and poured with incredible rapidity down a gorge of the Rivière Blanche, carrying with it large masses of rock. Over the top of the mountain there appeared a dense cloud of suffocating gases, brown and purple, accompanied by quantities of volcanic dust. This dust seems to have been the cause of most of the harm, for it caused suffocation.

Sometimes an eruption happens beneath the sea. Most of the volcanic islands of the Pacific began in this way, reaching the surface either by a gradual upward growth through a number of upheavals or by a terrific explosion on the sea floor. Both Vesuvius and Etna rose from the floor of the Mediterranean. Occasionally the effects of an eruption have been seen on the surface. Huge fountains of water play to a great height,

and dead fishes and volcanic cinders are seen floating around. After a time a small island may rise above the sea level, and this is gradually enlarged by succeeding explosions.

The Hawaiian Islands began like this. They are really a chain of volcanic mountains, most of which have long been extinct; but the largest is still upbuilding itself. Mauna Loa now rises to 13,680 feet and every few years fresh outbursts add new lava to the mountain mass. In 1949 it began erupting again after being quiet for more than six years. Great streams of lava were still pouring into the sea amidst clouds of steam in 1950. In 1790 Halemaúmau, the pit of four-thousand-foot Kilauea, below Mauna Loa, emitted a blast of ash so violent that it destroyed a Hawaiian army. Kilauea's pit is always active and is called the "pit of eternal fire." So thoroughly is

## THE FIRE MOUNTAINS

the conduct of these volcanoes understood that they have been made into the Hawaii National Park and tourists are encouraged to visit them.

A volcano born under a man's feet in his own cornfield is a new experience. The story is almost as incredible as that of Jason who sowed the mythical dragon's teeth and harvested armed men. Yet on February 20, 1943, in the State of Michoacan, Mexico, nature's most awe-inspiring spectacle came into the world. El Monstruo is the Tarascan Indians' name for the "fire"-breathing monster, known to the world as Paricutin Volcano.

This moon-like landscape of Paricutin showers up a fountain of red stars as from a gigantic Fourth of July Roman candle, recalling that Pillar of Fire, beacon of the Children of Israel. Paricutin is definitely a part of the arc of volcanoes, extending along the Pacific's shores from the Andes to Alaska, the Aleutians, Kamchatka, Japan and Java.

Still Paricutin grows and grows. No one can guess how long El Monstruo will remain alive. Like a locomotive, Paricutin puffs, timing its explosions six seconds apart. Almost from its Minerva-like birth volcanologists have attended it. But the scientists cannot examine the volcano's throat, for, at times, from its crater masses of vapor rise to three miles. And gas from the molten lava bubbles through the crater like carbon dioxide from a bottle of soda pop. It is the greatest show on earth. Sightseers even applaud the volcano when its "fireworks" become spectacular!

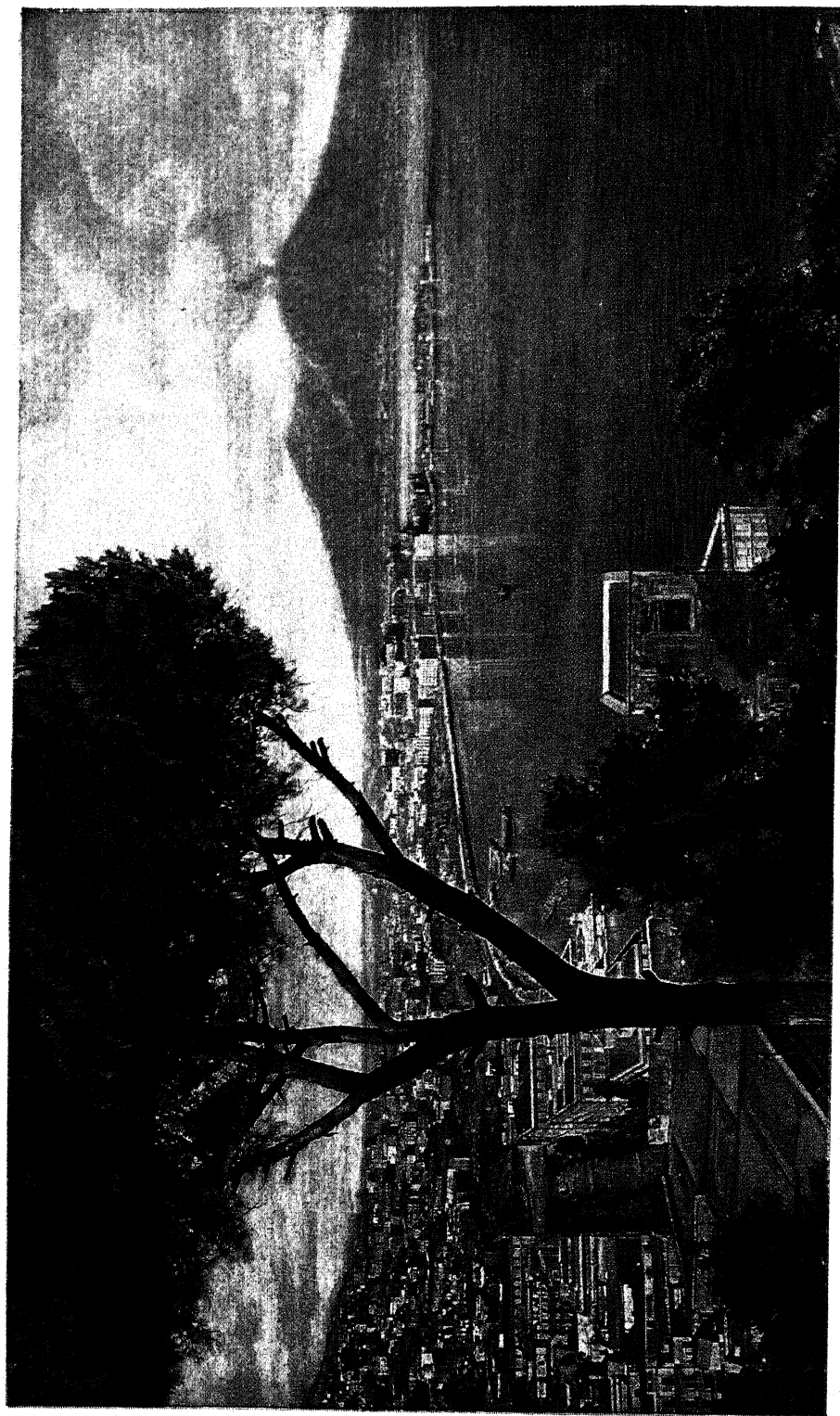
Every property holder in the Michoacan region is a potential owner of a live volcano. For underlying Paricutin is a lava reservoir of undetermined depth which explains the indefatigable industry of the volcano. Will Paricutin eventually dwell, snow-clad head in the upper air, with giant Orizaba (Citlatlepec) and Popocatepetl? Or will it disappear as mysteriously as it sprang up?



AMERICAN MUSEUM OF NATURAL HISTORY

### PARICUTIN, STRANGE VOLCANIC PRODUCT OF A MEXICAN FARM

Among nature's twentieth-century wonders is Paricutin. The volcano startled Mexico and the world by erupting on February 20, 1943, from a field, and burying the village of Paricutin.

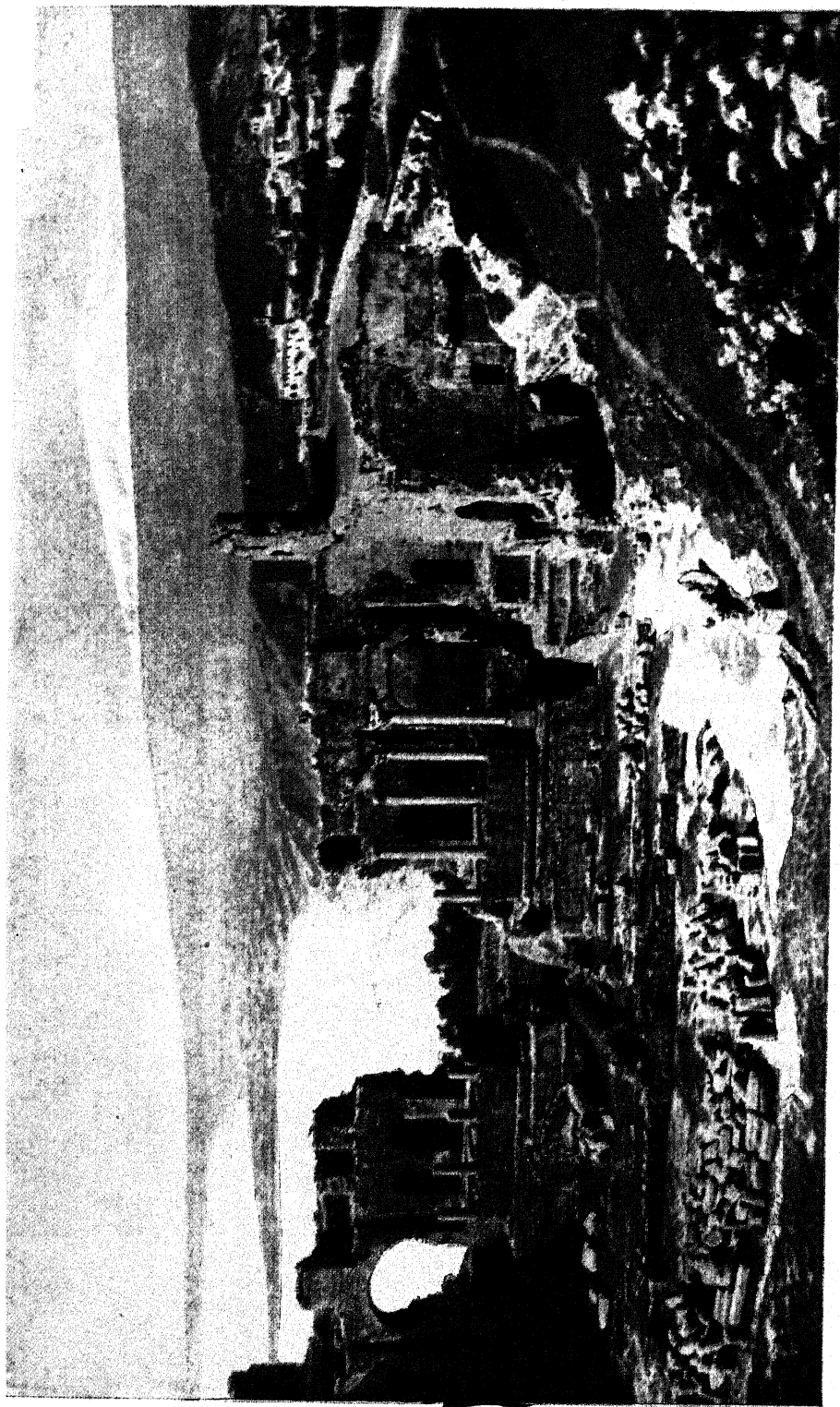


ACROSS THE BAY OF NAPLES rise the twin summits of Vesuvius, a volcano still active. Until 79 A.D. no one dreamed that the gracefully sloping mountain by the sea was dangerous, and busy, populous towns, such as ill-fated Pompeii, were built close to its foot. Then one August

day a black cloud arose from the mountain, accompanied by roars and rumbles; there was an explosion that blew off the mountain's top, and such quantities of cinders and ashes were expelled that Pompeii was buried twenty feet deep, as excavations have since disclosed.

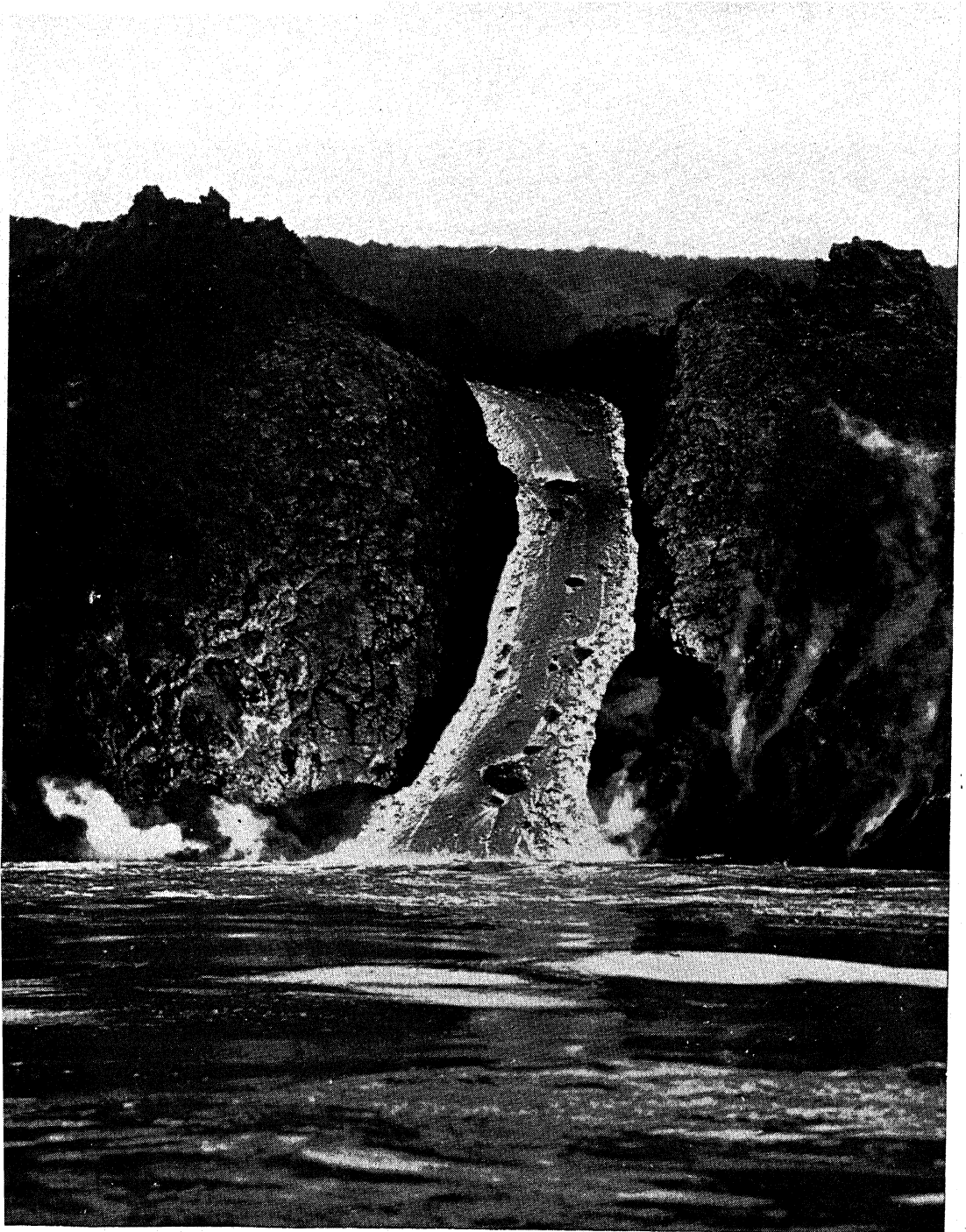
© E. N. A.





**SICILY'S MOUNT ETNA** wrapped in its winter coat of snow, looks so peaceful that it is difficult to realize it is an active volcano. Its crater is a chasm about 1,000 feet in depth. Etna has often laid waste the earth around it, destroying whole towns by its tongues of hot lava, while earth-

quakes that follow its convulsions take thousands of lives. In 1880 an observatory was built on the south side of the mountain, 9,075 feet above the sea—the highest inhabited house in Europe. These ruins of a Roman-restored Greek theater are at Taormina, a popular winter resort.



HAWAII VISITORS BUREAU

**MOLTEN LAVA** pours down the side of Mauna Loa, on the island of Hawaii. The hot stream carries rocks along, scorches plant life in its path and at last hisses into the sea.

# LIST OF COLOR PLATES

<b>AFGHANISTAN:</b>		<b>PAGE</b>	<b>BOLIVIA (continued)</b>		<b>PAGE</b>
Glacier on Chitral Border .. ..	4-9	Bolivian Indians .. ..	7-127	Spinning Llama Fleece .. ..	7-130
Fruit from Kandahar .. ..	4-12	Rock Gateway, Bolivia .. ..	7-131		
Woman Collecting Wood .. ..	4-13				
Stone Watch Tower .. ..	4-16	<b>BORNEO:</b>			
Mountainous Kafiristan .. ..	4-17	Klemantan Chief .. ..	5-258		
Nomads in the Mountains .. ..	7-302	Kenyah Warrior .. ..	5-259		
Caravan .. ..	7-315	Young Ibans .. ..	5-262		
<b>ALASKA:</b> Sitka .. ..	6-311	Dayak Girl .. ..	5-263		
<b>ALGERIA:</b>		<b>BRAZIL:</b>			
Kabyle Girl .. ..	5-43	Carnival Costume .. ..	7-153		
El Kantara .. ..	5-47	Transplanting Coffee Seedlings .. ..	7-156		
Date Harvest .. ..	5-50	Manaus .. ..	7-157		
Moorish Palace, Constantine .. ..	5-51	Rio de Janeiro Harbor .. ..	7-160-61		
At the Journey's End .. ..	5-54	Church of Our Lady of Penha .. ..	7-164		
<b>ANDORRA:</b> San Julian .. ..	2-293	Logging Operations .. ..	7-165		
<b>ARABIA:</b>		Salvador Harbor .. ..	7-168		
The Great Desert .. ..	3-362				
Camel Caravan .. ..	3-363	<b>BRITISH AFRICA:</b>			
Ravine near Petra .. ..	3-366	A Chieftain of Gambia .. ..	5-153		
Ancient Trade Route .. ..	3-367	Kikuyu Man and Girl .. ..	5-156		
Street in Jidda (Jeddah) .. ..	3-370	Nigerian Children .. ..	5-157		
Temple at Petra .. ..	3-371	A Masai Woman .. ..	5-160		
Great Mosque, Mecca .. ..	3-374	Nana Prempeh .. ..	5-160		
Caravan of Pilgrims .. ..	3-375	A Dervish of Africa .. ..	5-161		
<b>ARGENTINA:</b>		Hairdressing in Zanzibar .. ..	5-164		
Grape Harvest, Mendoza Province .. ..	7-201	Swahilis in Zanzibar .. ..	5-165		
Plaza de Congreso, Buenos Aires .. ..	7-204	Hippopotami .. ..	5-168		
Kavanaugh Building, Buenos Aires .. ..	7-205	Victoria Falls .. ..	7-346		
Iguassu Falls .. ..	7-208-09	Rainbow Fall .. ..	7-347		
Indians Baking Bread .. ..	7-212				
Decorated Sheep .. ..	7-212	<b>BULGARIA:</b>			
Gauchos .. ..	7-213	Monastery near Tirnovo .. ..	3-90		
Wind-swept Ushuaia .. ..	7-216	Isker Valley .. ..	3-91		
<b>AUSTRIA:</b>		Girls at a Fountain .. ..	3-94		
Hoch-Osterwitz Castle .. ..	2-218	Fruit-Gatherer .. ..	3-95		
Ankogel from Seebach Valley .. ..	2-219	Gabrovo .. ..	3-98		
Beside the Traunsee .. ..	2-222	Rila Monastery .. ..	3-99		
In an Alpine Valley .. ..	2-223	Gorge, Rhodope Mountains .. ..	3-102		
Gateway in Salzburg .. ..	2-226	Gate of Rila Monastery .. ..	3-103		
Old Quarter, Innsbruck .. ..	2-227	Valley of the Isker .. ..	7-328-29		
Benedictine Abbey at Melk .. ..	2-230				
The Hohen-Salzburg .. ..	2-231	<b>CANADA:</b>			
<b>BELGIUM:</b>		Girl Fishing .. ..	6-50		
Medieval Buildings, Bruges .. ..	1-204	Fishing, Restigouche River .. ..	6-51		
Sidewalk Restaurants, Bruges .. ..	1-205	Black Harbor, New Brunswick .. ..	6-54		
Square and Guild Houses, Brussels .. ..	1-208	Peggy's Point, Nova Scotia .. ..	6-55		
Grand' Place, Brussels .. ..	1-209	Making Hay, Nova Scotia .. ..	6-58		
Flower Market, Brussels .. ..	1-209	Gaspereau Valley .. ..	6-59		
Ghent Canal .. ..	1-212	Margaree Valley .. ..	6-62		
Shrimp-Vendor, Ostend Quay .. ..	1-213	Prince Edward Island .. ..	6-63		
Palais du Cinquantenaire, .. ..		Château de Ramezay .. ..	6-66		
Brussels .. ..	1-216-17	St. Louis Gate, Quebec .. ..	6-67		
Antwerp Harbor .. ..	1-220	Sous-le-Cap Street, Quebec .. ..	6-70		
Glass-Blowing Shop, Boom .. ..	1-221	Tadoussac Landing .. ..	6-71		
Lace-Maker, Bruges .. ..	1-224	Quebec Orchards .. ..	6-74		
<b>BHUTAN:</b>		Boys with a Dog Cart .. ..	6-75		
Royal Palace .. ..	4-125	Montmorency Falls, Quebec .. ..	6-78		
Maharaja and Councilors .. ..	4-132	Cape Trinity, Quebec .. ..	6-79		
Reincarnation of Buddha .. ..	4-133	Cross Lake, Cobalt .. ..	6-82		
Dharm Rájá .. ..	4-136	Peach Orchards, Ontario .. ..	6-82		
<b>BOLIVIA:</b>		Channel, Lake of Bays .. ..	6-83		
Aymará Potters .. ..	7-122	Sunnyside Beach .. ..	6-83		
Gateway, Tiahuanaco .. ..	7-123	Young Cattle, Ottawa .. ..	6-86		
Ancient Pottery .. ..	7-126	Lumber Jam, Ontario .. ..	6-86		
		Vineyards in Ontario .. ..	6-87		
		Ottawa River .. ..	6-87		
		Main Channel .. ..	6-90		

# LIST OF COLOR PLATES

CANADA (continued)		PAGE	EAST INDIES (See also JAVA, BORNEO):		PAGE
Sault Ste. Marie .. ..	6-91		A Sultan of Gowa .. ..	5-234	
Governmental Driveway .. ..	6-94		Ploughman and Carabao .. ..	5-235	
Peach Orchards in Bloom .. ..	6-95		Balinese Villagers .. ..	5-238	
Takkakaw Falls .. ..	6-98		Balinese Woman .. ..	5-239	
Twin Falls .. ..	6-99		Harvesting Rice .. ..	5-242	
Massive Mountain Range .. ..	6-102		Two Men of Bali .. ..	5-243	
Moraine Lake, Alberta .. ..	6-103		Balinese Woman .. ..	5-246	
Prince Albert Park .. ..	6-106		Chieftain of Bali .. ..	5-247	
The Selkirk Mountains .. ..	6-107		Two Javanese Women .. ..	5-250	
Bow Falls .. ..	6-110		Young Dancer of Bali .. ..	5-251	
Emerald Lake .. ..	6-111		Balinese Villagers .. ..	5-254	
CENTRAL AMERICA:			Javanese Couple .. ..	5-255	
Maya Figure, Honduras .. ..	7-26		Volcano in Java .. ..	7-386	
Lake Atitlán, Guatemala .. ..	7-27		EGYPT:		
Negro Carrying Bananas .. ..	7-30		Temple at Deir-el-Bahri .. ..	5-58	
Market Woman, Salvador .. ..	7-31		Statue of Rameses II .. ..	5-59	
CEYLON:			Statue of Tutankhamen .. ..	5-62	
Rice Fields .. ..	4-170		Royal Treasure .. ..	5-63	
Tea Garden .. ..	4-171		Alabaster Vases .. ..	5-66	
Tamil Dancers .. ..	4-174		Figure Beside a Shrine .. ..	5-67	
Tamil Girls .. ..	4-175		Carved Monster .. ..	5-70	
Native Boats on a River .. ..	4-178		Two Wooden Handmaidens .. ..	5-71	
Image of Buddha .. ..	4-179		Arch at Karnak .. ..	5-73	
Devil Dancer .. ..	4-182		Valley of the Kings .. ..	5-76	
Sinhalese Girl .. ..	4-183		Colossi of "Memnon" .. ..	5-77	
CHILE:			Great Sphinx at Gizeh .. ..	5-80	
Atacama Desert .. ..	7-134		An Alabaster Sphinx .. ..	5-81	
"Chilean Switzerland" .. ..	7-135		Pyramid of Sneferu .. ..	5-84	
Sunday Headdress .. ..	7-290		The Great Pyramid .. ..	5-85	
CHINA:			Pyramids of Gizeh .. ..	5-88	
The Great Wall .. ..	4-250		Lady of Cairo .. ..	5-105	
Monastery on Pu Tu Island .. ..	4-251		Nile River at Cairo .. ..	5-108	
Priest of Pu Tu .. ..	4-254		Water Seller .. ..	5-109	
Holy Man .. ..	4-255		Bazaar in Cairo .. ..	5-112	
Yangtze Kiang .. ..	4-258		El Azhar Mosque, Cairo .. ..	5-113	
Highway to Kalgan .. ..	4-259		Blue Mosque, Cairo .. ..	5-116	
Shanghai Man .. ..	4-262		View of Cairo .. ..	5-117	
Chinese Actor .. ..	4-263		Mosque of Sultan Hasan .. ..	5-120	
Temple in Ningpo .. ..	4-266		Ancient Sculptured Figure .. ..	7-251	
Street of Kiukiang .. ..	4-267		Models of Ancient Boats .. ..	7-276	
Bride and Bridegroom .. ..	4-270		Dahabiyehs and Feluccas .. ..	7-277	
Grandmother and Grandson .. ..	4-271		Sinai Peninsula .. ..	7-336	
Canal in Sungkiang .. ..	4-274		ENGLAND:		
Pagoda at Soochow .. ..	4-275		Kew Gardens .. ..	1-18	
Barren Mountains Slopes .. ..	4-278		At Polperro .. ..	1-26	
Walls of Liaoyang .. ..	4-279		Suffolk Fishermen .. ..	1-27	
Hall of Classics, Peking .. ..	4-330		Life Guard .. ..	1-30	
Entrance to Imperial Palace .. ..	4-331		Choir Boys, Canterbury Cathedral .. ..	1-31	
CONGO:			Wollaton Hall .. ..	1-50	
Native Headdress .. ..	7-288		Ullswater .. ..	1-51	
CUBA:			Cliffs near Seaford .. ..	1-54	
Sugar Mill .. ..	7-50		Cornwall's Coast .. ..	1-55	
Tobacco Field .. ..	7-51		Shakespeare Memorial Theater .. ..	1-58	
Street in Santiago .. ..	7-54		Devonshire Coast .. ..	1-59	
Royal Palms .. ..	7-55		The River Thames .. ..	1-62	
Morro Castle .. ..	7-58		Overlooking Derwentwater .. ..	1-63	
New Capitol, Havana .. ..	7-59		Tower of London .. ..	1-66	
CZECHOSLOVAKIA:			St Paul's Cathedral .. ..	1-67	
Carpathian Peasants .. ..	2-192		Trafalgar Square, London .. ..	1-70	
Women of Czechoslovakia .. ..	2-193		Tower Bridge, London .. ..	1-78	
Czech Mother and Child .. ..	2-196		Thames Embankment, London .. ..	1-79	
Religious Procession .. ..	2-197		Ancient Bronze Ornaments .. ..	7-262	
Czech Holiday Clothes .. ..	2-200		ESTHONIA (ESTONIA):		
DENMARK:			Women in Costume .. ..	2-185	
Danish Children .. ..	2-92		Girl in Bridal Robe .. ..	7-285	
Peasant Women .. ..	2-93		Woman Spinning .. ..	7-354	
On Stromo Island .. ..	2-96		FINLAND:		
			Peasant Woman .. ..	2-48	

# LIST OF COLOR PLATES

	PAGE		PAGE
<b>FRANCE:</b>		<b>ICELAND:</b>	
Dordogne River .. ..	1-242	Waterfalls .. ..	2-85
On a French Road .. ..	1-243	<b>INDIA, REPUBLIC OF:</b>	
Bridge at Orthéz .. ..	1-246	Pearl Palace, Gwalior .. ..	4-20
In the Pyrenees .. ..	1-247	Daulatabad Fortress .. ..	4-21
Fountain of Vaucluse .. ..	1-250	Maratha Horseman .. ..	4-24
St. Michel d'Aiguille .. ..	1-251	Pearl Mosque, Delhi .. ..	4-26
Delightful Chamonix .. ..	1-254	Old-Time Executioner .. ..	4-27
Muleteer in Puget-Théniers .. ..	1-255	Shah Jehan Palace, Delhi .. ..	4-30
Falaise Castle .. ..	1-274	Pearl Mosque, Delhi .. ..	4-31
Château at Josselin .. ..	1-275	Jama Masjid, Ahmadabad .. ..	4-34
Old Houses in Quimper .. ..	1-278	Open-Air Temple .. ..	4-35
Lovely Old Rouen .. ..	1-279	Great Mosque, Delhi .. ..	4-38
In Old Dinan .. ..	1-282	Cenotaph at Alwar .. ..	4-39
Caudebec-en-Caux .. ..	1-283	Dancing Girls .. ..	4-41
Mont St. Michel .. ..	1-286	Hall of Private Audience .. ..	4-44
Calvary at Concarneau .. ..	1-287	Taj Mahal, Agra .. ..	4-45
Stone Age Paintings .. ..	7-250	Bijapur Ruins .. ..	4-48-49
Primitive Monuments .. ..	7-263	Jain Temples, Kathiawar .. ..	4-52
Dolmen de Kergavat .. ..	7-263	Hindu Temple, Srirangam .. ..	4-53
Alsatian Headdress .. ..	7-291	Ghurka Woman .. ..	4-56
The River Drac .. ..	7-324	Hindu Temple, Gujarat .. ..	4-57
Gorge of the Tarn .. ..	7-325	Buddh Gaya Temple, Bihar .. ..	4-60
<b>FRENCH AFRICA:</b>		Kutb Minar Tower .. ..	4-61
Desert Twilight .. ..	3-348	Banaras .. ..	4-64-65
Camel Litter .. ..	3-349	Jama Masjid Courtyard, Delhi .. ..	4-68
Wanderers in the Desert .. ..	5-20	Golden Temple, Amritsar .. ..	4-69
Oasis in the Sahara .. ..	5-21	Kashmiri Women .. ..	4-102
Date Palms .. ..	5-24	Children of Kashmir .. ..	4-103
Dunes in the Sahara .. ..	7-333	Across the Sandy Wastes .. ..	7-314
<b>GERMANY:</b>		Gaekwar's Elephants .. ..	7-378
Rothenburg .. ..	2-122	Elephant in Trappings .. ..	7-379
Market-place, Worms .. ..	2-123	Elephants in Water .. ..	7-382
Bavarian Peasants .. ..	2-126	From the Royal Stables .. ..	7-383
Bride of Bückeburg .. ..	2-127	<b>INDOCHINA:</b>	
St. Goarshausen .. ..	2-130	Emperor of Annam .. ..	4-214
Houses at Spalt .. ..	2-131	Cambodia's King .. ..	4-215
Bavarian Bride .. ..	2-134	<b>IRAN, see Persia</b>	
Wendish Girls .. ..	2-135	<b>IRAQ:</b>	
Costume of Elze Valley .. ..	7-284	Tomb of Ezra .. ..	3-218
<b>GREECE:</b>		Mosque in Samarra .. ..	3-219
Athens from the Acropolis .. ..	3-9	Arab Woman .. ..	3-222
Sparta .. ..	3-12	Climbing a Date Palm .. ..	3-223
Meteora Monasteries .. ..	3-13	Bridge at Mosul .. ..	3-226
Ruins of Corinth .. ..	3-16	Arch at Ctesiphon .. ..	3-227
Temple of Apollo, Corinth .. ..	3-17	Street in Kerbela .. ..	3-230
Zemenon Villagers .. ..	3-20	Basra .. ..	3-231
Nemean Peasants .. ..	3-21	Ancient Assyrian Bricks .. ..	7-254
Macedonian Women .. ..	3-24	Painted Bricks from Nimrud .. ..	7-255
Bride and Bridegroom .. ..	3-25	Painting of a Priest or God .. ..	7-258
Hadrian's Arch, Athens .. ..	3-28	<b>IRELAND:</b>	
Erechtheum, Athens .. ..	3-29	County Antrim Coast .. ..	1-19
The Acropolis, Athens .. ..	3-32-33	Salmon Leap, Galway .. ..	1-126
The Propylæa, Athens .. ..	3-36	Farm Cottage, Mayo .. ..	1-127
The Parthenon, Athens .. ..	3-37	St. Lawrence Gate .. ..	1-130
Columns of the Parthenon .. ..	3-40	Cathedral Ruins, Tipperary .. ..	1-131
<b>GREENLAND:</b>		Dunluce Castle .. ..	1-134
Eskimo Boy .. ..	2-81	Blarney Castle .. ..	1-135
Umanak Fjord .. ..	2-84	Cottage in Donegal .. ..	1-138
Eskimo Children .. ..	2-88	A Holy Well .. ..	1-139
Eskimo Woman and Baby .. ..	2-89	Cliffs of Doon .. ..	1-142
<b>HAWAII:</b>		Bridge, Carrick-a-Rede .. ..	1-143
Natural Bridge .. ..	6-306	<b>ISRAEL:</b>	
Waikiki Beach .. ..	6-307	Mosque in Acre .. ..	3-329
From Nuuanu Pali .. ..	6-310	Sea of Galilee .. ..	3-332
<b>HUNGARY:</b>		Bridge across the Jordan .. ..	3-333
Girl at a Well-Wheel .. ..	2-250	Girl in Bethlehem .. ..	3-336
Bride and Bridegroom .. ..	2-251	Jews in Jerusalem .. ..	3-337



# LIST OF COLOR PLATES

ITALY:	PAGE	MOROCCO:	PAGE
Lake Como .. .. .	2-296	Moorish Woman .. .. .	5-9
Lake Maggiore .. .. .	2-297	Moorish Doorway .. .. .	5-12
Lake Orta .. .. .	2-300	Two Moors .. .. .	5-13
Washday at Omegna .. .. .	2-301	Carpenter's Fountain, Fez .. .. .	5-16
Fisherman of Salerno .. .. .	2-304	Shrine in Fez .. .. .	5-17
Boys of the Campagna .. .. .	2-306	NETHERLANDS:	
Girl of the Abruzzi .. .. .	2-307	Windmill .. .. .	I-178
Riva .. .. .	2-310	Zeeland Canal Port .. .. .	I-179
Sorrento .. .. .	2-311	Amstel, River Canal .. .. .	I-182
Fishing Boats, Naples .. .. .	2-314	Royal Palace, Amsterdam .. .. .	I-182
Castle of Arco .. .. .	2-315	Peace Palace, The Hague .. .. .	I-183
Old San Remo .. .. .	2-318	Alkmaar Cheese-Carriers .. .. .	I-186
Palazzo Vecchio, Florence .. .. .	2-319	Lisse Tulip Field .. .. .	I-187
Amphitheater, Pola .. .. .	2-329	Marken Island Children .. .. .	I-190
Leaning Tower, Pisa .. .. .	2-332	Farmhouse .. .. .	I-191
Cathedral, Florence .. .. .	2-333	Houses, Edam .. .. .	I-191
View of Rome .. .. .	2-336	Arnhem in Gelderland .. .. .	I-193
Colosseum, Rome .. .. .	2-337	Walcheren Island Village .. .. .	I-196
Pincio Gardens, Rome .. .. .	2-340	Volendam Village Street-Canal .. .. .	I-197
Temple of Saturn, Rome .. .. .	2-341	Canal, Cathedral Tower, Utrecht .. .. .	I-200
Swiss Pontifical Guards .. .. .	2-344	Haarlem's Amsterdam Gate .. .. .	I-201
Venetian Hawker .. .. .	2-361	NORTH AMERICAN INDIANS:	
Bridge of Sighs, Venice .. .. .	2-364	Navaho Women .. .. .	6-18
Gondolas on Canal, Venice .. .. .	2-365	Thunderbirds Blanket .. .. .	6-19
Grand Canal, Venice .. .. .	2-368	Sand Painting .. .. .	6-22
Church of St. Mark, Venice .. .. .	2-369	Zuñi Craftsman .. .. .	6-23
Gondolas of Venice .. .. .	7-273	Iroquois Mask .. .. .	6-26
The Bay of Naples .. .. .	7-390	Seminole Robe .. .. .	6-27
JAPAN:		Sioux Costume .. .. .	6-30
Sacred Isle of Miyajima .. .. .	4-334	Totem Poles .. .. .	6-31
Fuji the Peerless .. .. .	4-335	Hopi Indian .. .. .	6-274
Two Japanese Maidens .. .. .	4-338	Walapai Woman .. .. .	6-275
Under the Cherry Trees .. .. .	4-339	Making Pottery .. .. .	6-278
Temple Gate at Miyajima .. .. .	4-342	Apache Brave .. .. .	6-279
Temple Garden, Kyoto .. .. .	4-343	Pueblo Chief .. .. .	6-282
Buddhist Priest .. .. .	4-346	Rain Dance of the Zuñis .. .. .	6-283
Friendly Greetings .. .. .	4-347	Zuñi Basket-Maker .. .. .	7-358
Gardens of Hori-Kiri .. .. .	4-350	Navaho Woman Weaving .. .. .	7-359
Girls and Babies .. .. .	4-351	NORWAY:	
New Year's Customs .. .. .	4-354	In the Nord Fiord .. .. .	2-9
Wistaria Garden .. .. .	4-355	Hardanger Woman .. .. .	2-13
Yasaka Pagoda, Kyoto .. .. .	4-358	Rjukanfos (Reeking Falls) .. .. .	2-16
Japanese Garden .. .. .	4-359	Horunger Mountains .. .. .	2-17
Fujiyama .. .. .	7-387	Norwegian Lapps .. .. .	2-20
JAVA (See also EAST INDIES):		Folk Museum, Oslo .. .. .	2-21
Raft on a Lake .. .. .	7-280	Seven Sisters Falls .. .. .	7-351
Volcano .. .. .	7-386	PAKISTAN:	
JORDAN:		Dancers .. .. .	4-72
Sheep and Goats on Road .. .. .	3-340	Fruit-Seller .. .. .	4-90
Moslems in Jerusalem .. .. .	3-341	Washing in River .. .. .	4-91
Dome of the Rock .. .. .	3-344	Musicians and Dancers .. .. .	4-94
Married Woman in Costume .. .. .	3-345	Sikha .. .. .	4-95
LATVIA:		Pathans .. .. .	4-98
Women in Costume .. .. .	2-188	Ivory-Carver .. .. .	4-99
Women of Rucava .. .. .	2-189	PERSIA:	
LIECHTENSTEIN:		Archers of King Darius .. .. .	7-259
Peasant Girl .. .. .	2-289	PERU, see Bolivia	
MEDITERRANEAN ISLANDS:		PHILIPPINE ISLANDS:	
Ionian Islands .. .. .	I-370	Bamboo Hut .. .. .	5-306
Majorca .. .. .	I-371	Houses on Piles .. .. .	5-307
Village in Malta .. .. .	I-374	Ilongot Girl .. .. .	5-310
Valetta, Malta .. .. .	I-375	Mandaya Warrior .. .. .	5-311
MEXICO:		PORTUGAL:	
Popocatepetl .. .. .	7-18	Vintage Time .. .. .	I-362
Old Water Tower .. .. .	7-19	River Douro .. .. .	I-363
Making Tortillas .. .. .	7-22	Cintra .. .. .	I-366
Street in Mexico .. .. .	7-23	Carnival Costumes .. .. .	I-367

# LIST OF COLOR PLATES

	PAGE		PAGE
<b>RUMANIA:</b>		<b>SPAIN (continued)</b>	
The Great Danube .. ..	3-122	Gipsies Dancing .. ..	7-298
Peasants of Rumania .. ..	3-123	A Gipsy Girl .. ..	7-299
Peasant Maiden .. ..	3-126		
Dancers of the Calusare .. ..	3-127	<b>SWEDEN:</b>	
<b>RUSSIA:</b>		Midnight Sun .. ..	2-24
Peasant Hunting .. ..	3-130	Girls of Leksand .. ..	2-33
Ukrainian Girls .. ..	3-131	Fishermen of Mölle .. ..	2-36
Family of Karelians .. ..	3-134	Peasant Girls .. ..	2-37
Peasants with a Sleigh .. ..	3-135	Fiddler .. ..	2-40
Kremlin, Moscow .. ..	3-153	Woman of Dalarne .. ..	2-41
Cathedral, Moscow .. ..	3-156	Flower-Gatherers .. ..	2-44
River Moskva .. ..	3-157	Lapp Children .. ..	2-45
Panorama from Kremlin .. ..	3-160-61	<b>SWITZERLAND:</b>	
<b>SAN MARINO:</b>		The Allalinhorn .. ..	2-254
La Rocca .. ..	2-292	The Matterhorn .. ..	2-255
<b>SCOTLAND:</b>		Girls of Hallau .. ..	2-258
Crathie Church, Aberdeenshire .. ..	1-19	Children at Unterschächen .. ..	2-259
Loch Leven (west) .. ..	1-98	Peasants and Their Goats .. ..	2-262
Aberdeen Moors .. ..	1-99	Mountain Pastures .. ..	2-263
Girl Picking Heather .. ..	1-102	Gorge of Gondo .. ..	7-318
In the Trossachs .. ..	1-103	Alpine Valley .. ..	7-321
An Old-Time Cottage Home .. ..	1-106	<b>THAILAND:</b>	
Ploughing in Peeblesshire .. ..	1-107	Bangkok .. ..	4-202
Highland Cattle .. ..	1-107	Houses on Piles .. ..	4-203
Glasgow University .. ..	1-110	Outside the Royal Palace .. ..	4-206
Art Gallery, Edinburgh .. ..	1-111	Siamese Drama .. ..	4-207
Tweed River Bridge .. ..	1-114	Elephants .. ..	4-210
Melrose Abbey .. ..	1-114	Buddhist Temple .. ..	4-211
Tweed Loom .. ..	1-115	<b>TIBET:</b>	
Holyrood Palace, Edinburgh .. ..	1-118	Devil Dancer .. ..	4-121
Old Stirling Bridge .. ..	1-119	Na-Chung Monastery .. ..	4-124
Calves on North Uist .. ..	1-122	The Potala, Lhasa .. ..	4-128-29
Mending Nets at Oban .. ..	1-123	<b>TUNISIA:</b>	
Shetland Woman Spinning .. ..	7-355	Beduin Girls .. ..	3-352
<b>SICILY:</b>		Young Beduin Mother .. ..	3-353
In Taormina .. ..	2-372	Arab Girl .. ..	3-356
Painted Boats .. ..	2-373	Beduin Mothers .. ..	3-357
Monte Pellegrino .. ..	2-373	Blind Beggar and His Guide .. ..	3-360
Ruins at Girgenti .. ..	2-376	Street of Kairawan .. ..	5-42
Donkey Water Carrier .. ..	7-265	Kairawan .. ..	5-46
Mount Etna .. ..	7-391	Tunis .. ..	5-51
<b>SOUTH SEA ISLANDS:</b>		Beduin Woman .. ..	5-55
Dancers of Ocean Island .. ..	5-298	Oasis of Gafsa .. ..	7-332
Beating out Tapa .. ..	5-299	<b>TURKESTAN:</b>	
Preparing Kava .. ..	5-299	Samarkand .. ..	3-164
Solomons Chief .. ..	5-302	Bokhara .. ..	3-165
War Canoe .. ..	5-303	The Roof of the World .. ..	3-168
Solomon Island Canoe .. ..	7-281	<b>TURKEY:</b>	
Gala Hats in Samoa .. ..	7-295	Istanbul University .. ..	3-265
<b>SPAIN:</b>		Blue Mosque, Istanbul .. ..	3-268
Bridge at Ronda .. ..	1-306	Hagia Sophia, Istanbul .. ..	3-268
Gate of Justice, Alhambra .. ..	1-307	Early Morning Haul .. ..	3-269
Captive's Tower, Alhambra .. ..	1-310	Rumeli Hisari (Castle of Europe) .. ..	3-272-73
Court of Lions, Alhambra .. ..	1-311	Ancient Graves, Istanbul .. ..	3-276
Moorish Arches, Cordova .. ..	1-314	Golden Horn .. ..	3-277
In Granada .. ..	1-315	Houses, Istanbul .. ..	3-280
Wrapping Oranges, Alora .. ..	1-318	<b>UNITED STATES:</b>	
Picking Mulberry Leaves .. ..	1-319	Independence Hall .. ..	6-186
Gathering Grapes .. ..	1-322	Mount Vernon .. ..	6-187
Spanish Woman .. ..	1-323	Washington Monument .. ..	6-190
Man and Girl in Costume .. ..	1-326	Pan-American Union .. ..	6-191
A Serenade .. ..	1-327	Making Maple Sugar .. ..	6-210
Spanish Singer .. ..	1-330	Mulberry Street, New York .. ..	6-211
Lady of Andalusia .. ..	1-331	Devil's Pulpit, Maine .. ..	6-214
Murcian Girl .. ..	1-334	Niagara Falls .. ..	6-215
Girl in Gala Dress .. ..	1-335	Delaware Water Gap .. ..	6-218
Stone Age Paintings .. ..	7-250	White Horse Ledge .. ..	6-219
		Chew House .. ..	6-222

## LIST OF COLOR PLATES

UNITED STATES (continued)	PAGE	UNITED STATES (continued)	PAGE
Johnston Gate, Harvard .. ..	6-223	Glacier National Park .. ..	6-390
The Swannanoa .. ..	6-226	Crater Lake .. ..	6-391
Lookout Mountain .. ..	6-227	Yosemite Falls .. ..	6-394
Harper's Ferry .. ..	6-230	Grand Canyon .. ..	6-395
Texas Plains .. ..	6-231	Zion National Park .. ..	6-398
Courtyard, New Orleans .. ..	6-234	Bryce Canyon .. ..	6-399
Christ Church, Alexandria .. ..	6-235		
Bruton Parish House .. ..	6-235	<b>WALES:</b>	
Bay Saint Louis .. ..	6-238	Carreg Cennan (castle) .. ..	1-18
Magnolia Gardens .. ..	6-239	Chimney-Pot Hats .. ..	7-294
Arch Rock, Mackinac Island .. ..	6-258		
Fort Snelling .. ..	6-259	<b>WEST INDIES:</b>	
Tavern, Lafayette, Ohio .. ..	6-262	Pillars of Hercules .. ..	7-62
Cedar River .. ..	6-263	Making Straw Hats .. ..	7-63
White River, Ozark Plateau .. ..	6-266		
Black Hills .. ..	6-267	<b>YUGOSLAVIA:</b>	
Rocks near Camp Douglas .. ..	6-270	The Narenta Valley .. ..	3-58
Horseshoe Fall, Illinois .. ..	6-271	Sheep Market .. ..	3-59
San Luis Rey .. ..	6-286	River Pliva .. ..	3-62
A Giant Cactus .. ..	6-287	Mostar .. ..	3-63
Mount of the Holy Cross .. ..	6-298	Narenta River .. ..	3-66
Canyons of the Colorado River .. ..	6-299	Bridge, Narenta River .. ..	3-67
Multnomah Falls .. ..	6-302	Croatian Lovers .. ..	3-70
California Gardens .. ..	6-303	Yugoslavian Girl .. ..	3-71
Grand Canyon .. ..	6-386	Gipsy Orchestra .. ..	7-303
Emerald Spring .. ..	6-387	Precipice, Narenta River .. ..	7-319
		Falls Below Jajce .. ..	7-350

## SPELLING GEOGRAPHICAL NAMES

The spelling of geographical names has always shown much variation. One who studies atlases and reads books of travel may find the same name spelled in a half dozen or more different ways, though all apparently come from the same root word; or may find two or more entirely different names which evidently refer to the same place. Many of the European names most familiar to us are spelled differently by the inhabitants of the city, or country, and by the outside world. French influence has been very strong. The Italians themselves say Roma, Firenze and Napoli, but we use the French forms Rome, Florence and Naples. The Germans say Köln but we use the French form Cologne. There are many other similar instances.

Another great cause of difference is the difficulty of transliteration. While most of the languages of Western Europe which have spread over the Americas have the same, or almost the same alphabets each has some sounds which are difficult to express in another language. Moreover, some of the letters are pronounced differently in different languages, and the rules for the silent letters and the pronunciation of double letters are different.

These difficulties are small, however, when compared with the differences in the alphabets used in Eastern Europe, Asia and Africa. There are many cases here where our English does not have the same sounds found in these alphabets, and we can only approximate them. For example you will see both Romanov and Romanoff as the name of the old Russian royal family, also Kiev and Kieff. The actual Russian sound is neither "v" nor "ff."

The changes in governments and in political boundaries that followed both world wars brought about thousands of changes. When some nationalities gained their independence, they made a clean sweep of place names used by former governments or else changed the spellings. At various times Prague became Praha; Pressburg became Bratislava; Helsingfors became Helsinki; Belgrade became Beograd; Monastir became Bitolj. In other cases countries already independent have shown a tendency to revert to archaic forms of names which showed foreign influence.

# ALPHABETICAL INDEX

In this index the figures in bold type indicate volume numbers, those in light type refer to page numbers. A single star before a page number marks an illustration; two stars are placed before color plates. The repetition of a page number, first without a star and then with a star, shows that there is an illustration on the page, in addition to an important text reference.

## A

**Aalborg**, Danish port, 2-99, 102  
**Aarhus**, Danish port, 2-99  
**Abadan**, port of Iran, 3-215  
**Abbey Theatre**, Dublin, 1-133, 148  
**Abbott, Mount**, British Columbia, 6-413  
**Abd-el-Krim**, leader of Rifs, Morocco, 5-15  
**Abdullah, King**, of Jordan, plans for Greater Syria, 3-291  
**Aberdeen**, Scotland, 1-117  
**Aberdeenshire**, Scotland, 1-19, \*\*99, \*100  
**Aborigines**, of Australia, 5-348-57; 7-283  
     in New Guinea, 5-272  
**Abruzzi**, Italy, girl, 2-307  
**Abyssinia**, *see* Ethiopia  
**Acadia National Park**, Maine, 6-380  
**Acadians**, expulsion from Nova Scotia, 6-43  
**Acadie**, *see* Nova Scotia  
**Acapulco**, resort of Mexico, 7-15  
**Accordions**, manufacture of, Czechoslovakia, 2-213  
**Accra**, capital, Gold Coast, 5-144, 145  
**Achill Island**, Ireland, 1-144, \*145  
**Achinese**, people of Sumatra, 5-245  
**Acicastello**, town of Sicily, 2-3373  
**Aconcagua**, Andes peak, 7-138, 210  
**Aconcagua Valley**, Chile, 7-136  
**Acre**, Israel, mosque, 3-329  
**Acrocorinth**, citadel of Corinth, Greece, 3-16, \*\*17  
**Acropolis**, citadel of Athens, 3-9, \*\*32-33, \*\*37, 41, \*43  
**Adams, John**, 6-167  
**Adare**, town of Ireland, 1-147  
**Adare, Cape**, Antarctica, 7-223  
**Addams, Jane**, American humanitarian, 6-264  
**Addis Ababa**, capital of Ethiopia, 5-132, \*133  
**Adelie Land**, Antarctica, 7-228  
**Aden**, British colony in Arabia, 3-381, 383  
**Adirondack Mountains**, New York, 6-216  
**Admiralty Islands**, 5-272; 7-265  
**Aepyornis**, extinct bird of Madagascar, 5-219  
**Aetna, Mount**, *see* Etna  
**Afghanistan**, 4-4-18  
     transportation, 7-307, \*\*315  
     facts and figures, 4-18  
**Africa**  
     British, 5-141-72  
     map, 5-143  
     Congo, 5-173-88  
     elephants, 7-377, 380, 381  
     French territories, 5-4-56  
     map, 5-23  
     Madagascar Island, 5-211-23  
     Morocco, 5-4-18  
     peoples of, 7-241-42  
     South Africa, 5-189-210  
     Uganda, 7-296  
     Victoria Falls, 7-343, 345, \*\*346, \*\*347  
     For list of articles *see* Table of Contents, Volume V  
**Africa, South-West**, mandated territory, 5-206, 210  
**Agra**, city of India, 4-445  
**Agriculture**, Afghanistan, 4-7  
     Albania, 3-51, \*51  
     Arabia, 3-368, \*369, 382  
     Argentina, 7-201, 202, 214  
     Armenia, 3-184, 186-87, 189  
     Australia, 5-331, 334, 339  
     Austria, 2-233  
     Bali, 5-240  
     Belgian Congo, 5-173  
     Belgium, 1-215, 218, \*223, \*227  
     Brazil, 7-149-50, \*\*156, 163, 166-67  
     Bulgaria, 3-86  
     Burma, 4-150  
     Canada, 6-7-8, 36, 39  
     Atlantic Provinces, 6-46-47

## Agriculture (continued):

British Columbia, 6-112  
 Nova Scotia, 6-52  
 Ontario, 6-92, \*\*95, 96  
 Prairie Provinces, 6-100, 104, \*104, 105, 108, 131, 135  
 Quebec, 6-68  
 Yukon and Northwest Territories, 6-151  
 Canary Islands, 1-171  
 Celebes, East Indies, 5-248  
 Central America, 7-28  
 Ceylon, 4-166-73, 176  
 Chile, 7-136, 145-46  
 China, 4-269, 277, 281, \*282  
 Colombia, 7-106, 107-08  
 Costa Rica, 7-37  
 Crete, 1-379, 381  
 Cuba, 7-43, \*44, \*45, 47, \*48, 49  
 Czechoslovakia, 2-201, \*207, \*211  
 Denmark, 2-99, 102-05  
 Dominican Republic, 7-91  
 Egypt, 5-94, 96, \*96, \*97, 98, \*98, \*99, 100, 102  
 El Salvador, 7-35  
 England, 1-44  
 Estonia, 2-174, \*179  
 Finland, 2-56, 58, 60  
 Formosa, 4-239, \*241  
 France, 1-234, 236-38, \*241, 262  
 Gambia, 5-150  
 Georgian Republic, 3-190, \*195  
 Germany, 2-113, \*113, 138, 140-41  
 Greece, 3-8, \*10, \*11, \*18  
 Guianas, 7-96  
 hacienda system in Latin America, 6-166-67, 176  
 Hawaii, 6-308, \*308, 309  
 Honduras, 7-332  
 Hungary, 2-245  
 Iceland, 2-71, 74, \*78  
 India, 4-42, \*43, 50-51, 54, 58-59, \*112; 7-376  
 Indian tribes (North America), 6-17, 20  
 Indonesia, 5-232  
 Iran, 3-211  
 Iraq, 3-228, \*232, \*238  
 Ireland, 1-127, \*146, 155  
 Israel, 3-325, \*326, 331  
 Italy, 2-299, 302, 305  
 Jamaica, 7-74  
 Japan, 4-333, \*340, 344  
 Java, 5-227, 231, 232  
 Jordan, 3-339, 342  
 Kenya, 5-152  
 Korea, 4-374, \*375, 376, \*381  
 Latvia, 2-177  
 Lebanon, 3-314, \*321, \*322  
 Liberia, 5-138  
 Libya, 5-49, 53  
 Madagascar, 5-213, \*217  
 Manchuria, 4-283  
 Maoris, New Zealand, 5-380  
 Mexico, 7-6-7, 13, \*13  
 Netherlands, 1-180, \*\*191, \*192  
 New Guinea, 5-273  
 New Zealand, 5-362, \*363, 367  
 Nigeria, 5-143, 145  
 Northern Rhodesia, 5-163  
 Norway, 2-10  
 Nyasaland, 5-163  
 Pacific islands, 5-275-76, 284, 288-89, 291  
 Pakistan, 4-77, 79, \*88  
 Paraguay, 7-171, \*176  
 Persia, 3-203  
 Peru, 7-118  
 Philippines, 5-305, 313-14, \*319  
 Portugal, 1-351  
 Puerto Rico, 7-79, 82  
 Rumania, 3-107, \*115, 116, \*118  
 Russia, 3-132, \*133, 139, 140, 143, 145, \*145  
 Siberia, 3-155

# ALPHABETICAL INDEX

## Agriculture (continued):

- Russian Azerbaijan, 3-196
- Sardinia, 1-377
- Scotland, 1-104, \*\*111, 117
- Sicily, 2-377, 382-83
- South Africa, 5-193
- Southern Rhodesia, 5-169
- Spain, 1-220, 332-33, \*333, \*338
- Sudan, 5-128-29
- Sumatra, 5-253
- Sweden, 2-32
- Switzerland, 2-268
- Syria, 3-291, \*292, 304
- Tanganyika, 5-158, \*166
- Thailand, 4-198
- Tunisia, 5-45
- Turkistan, 3-169
- Turkey, 3-253-54, \*254, \*257, \*261
- Uganda, 5-155
- United States
  - Middle West, 6-249-65
  - North Central States, 6-362
  - Southern States, 6-236, 244, 246, 337, 339, 349
  - Western States, 6-290, 363, 364, 368, 372
- Uruguay, 7-190
- Uzbekistan, 3-177
- Venezuela, 7-101, 102
- Wales, 1-96
- West Indies, 7-75
- Yugoslavia, 3-61, 74, \*76, 79
- Zanzibar, 5-159
- See also* Irrigation; Soil
- Ahmadabad**, India, mosque, 4-\*\*\*4
- Aiguille Verte**, French Alps peak, 1-\*\*\*254
- Ainus**, people of Japan, 4-337; 7-242
- Air service**
  - Africa, 5-22
  - Alaska, 6-\*\*\*13, 314-15
  - Australia, 5-340, \*342
  - Brazil, 7-163
  - Canada, 6-109
  - Denmark, 2-94
  - helicopter, 7-311
  - Italy, 2-338
  - Mexico, 7-15
  - New Guinea, 5-274
  - New Zealand, 5-369
  - Pakistan, 4-82
  - private passenger plane, 7-267
  - Siberia, 3-155
- Airports**, Berlin, Germany, 2-150
  - Carrasco, Uruguay, 7-198
  - Dublin, Ireland, 1-141
  - Gander, Newfoundland, 6-47
  - Santos Dumont, Brazil, 7-163
- Ajaccio**, chief town of Corsica, 1-372
- Akbar**, Mogul ruler of India, 4-74
- Aklavik**, Canada, 6-7
- Akron**, city of Ohio, 6-350
- Al-Azhar Mosque**, Egypt, 5-91
- Al Fustât**, ancient city of Egypt, 5-107, 115
- Al-Tahrir Square**, Cairo, 5-101
- Alabama**, state, 6-228, 232, 236, 242-43
  - cities, 6-338-39, \*342, \*343
  - facts and figures, 6-248
- Aiaculufs**, Indian tribe, Tierra del Fuego, 7-138
- Alamo Mission**, San Antonio, Texas, 6-349
- Alaska**, 6-304, 305, 313-16
  - dog teams, 7-313
  - Indians, 6-28
  - Mount McKinley National Park, 6-380
  - facts and figures, 6-316
- Alaska Highway**, 6-149, 314
- Awali**, Bedouin group of Syria, 3-297
- Albania**, 3-45-56
  - facts and figures, 3-56
- Alberta**, province of Canada, 6-7, 97-116, \*120, 134-36, \*139, \*140, \*405
  - national parks, 6-401-02, \*402, \*403, 404, \*404, 406, \*409, 410, \*410, 412, \*412, \*413, \*418, \*419, 420, 422, 432
  - provincial parks, 6-429, 431
  - facts and figures, 6-120
- Albuquerque**, city in Spain, 1-321
- Albuquerque**, city of New Mexico, 6-363, 364
- Alcázar**, Moorish palace, Seville, Spain, 1-312
- Aleppo (Alep)**, city of Syria, 3-294, 303-04
- Alfoories**, people of Ceram, 5-256
- Aleutian Islands**, 6-314

## Alexander the Great

- conquests of, 3-7
- elephants used against, 7-371
- Alexandria**, city, Egypt, 5-95
- Alexandria**, town of Virginia, 6-\*\*\*235
- Alföld**, plains of Hungary, 2-243
- Algeria**, 5-33-48, \*34, 51, \*53
  - Bedouins, 3-359
  - Constantine, town, 7-327
  - facts and figures, 5-56
- Algiers**, capital of Algeria, 5-34, 37, \*40
- Algoma district**, Ontario, Canada, 6-84-85
- Algonkian Indians (Algonquins)**, 6-20, 25
- Algonquin Provincial Park**, Ontario, 6-84, 427-28
- Alhambra**, Moorish palace, Granada, Spain, 1-309
  - Captive's Tower, 1-\*\*\*310
  - Court of the Lions, 1-\*\*\*311
  - Gate of Justice, 1-\*\*\*307
- Ali Kapu**, gateway structure, Iran, 3-205
- Alkmaar**, Netherlands, 1-177, \*\*186
- All American Highway**, 7-38, \*136
- Allalinhorn**, peak in Alps, Switzerland, 2-\*\*\*254
- Allegheny River**, 6-332
- Alleppy**, town, India, 4-28
- Alnwick**, town of England, 1-47
- Aloes**, harvest, West Indies, 7-75
- Alpenhorn**, Swiss musical instrument, 2-265
- Alphabets**, ancient, 3-305
- Alps, mountains**
  - Aiguille Verte, peak, 1-\*\*\*254
  - Austria, 2-\*\*\*219, \*220, \*\*223, \*224, \*225, 228
  - Chamonix Valley, France, 1-240
  - French, 1-241, \*244
  - Switzerland, 2-253-76, \*266
  - Simplon Pass, 7-\*\*\*318
  - valleys, cause of, 7-\*\*\*321
  - See also* Tyrol, Austrian
- Alsace**, 1-230
  - headress, 7-\*\*\*291
- Altai Mountains**, Mongolia, 4-303, \*309
- Aluminum**
  - Norwegian industry, 2-8
- Alwar**, India, cenotaph, 4-\*\*\*39
- Amager**, Danish island, 2-94
- Amarás**, Indians of Perú, 7-\*\*\*122
- Amazon River**, South America, 7-105, 125, 149, \*151, 154, 159, 320
  - transportation, 7-310
- Amazonia**, river basin, Brazil, 7-154, 159
- Amenhotep III**, king of Egypt, 5-60-61, \*\*77
  - temple of, 5-72
- Amenhotep IV (Akhenaten)**, king of Egypt, 5-61
- America**, peoples of, 7-242-43
- American Geographical Society**, work of, 1-12
- American River**, California, 6-196
- Amethyst Lake**, Alberta, 6-403
- Amman**, capital, Jordan, 3-338, 342
- Ammon**, Egyptian god, temples to, 5-65, \*86
- Amritsar**, India, Golden Temple of Sikhs, 4-\*\*\*69
- Amstel**, canalized river, Netherlands, 1-\*\*\*182
- Amsterdam**, city, Netherlands, 1-\*\*\*182, \*194, 199
- Amundsen, Roald**
  - Antarctic explorations, 7-223
- Anapolis**, city, Brazil, 7-159
- Anatolia**, Asiatic part of Turkey, 3-247-48, \*262
- Ancestor worship**
  - China, 4-265
- Anchorage**, city of Alaska, 6-313
- Andalusia**, Spain
  - Seville, 1-328
  - See also* Spain
- Andersen, Hans Christian**, 2-95, 98
  - birthplace, in Denmark, 2-102
- Andes Mountains**, South America, 7-105-32, 133-47, 210, \*340
- Andorra Republic**, 2-284, \*286, 288, \*290, 291, \*\*293
  - gipsies, 7-304
  - facts and figures, 2-294
- Andrews, Roy Chapman**, explorations in Gobi, 4-305, 307
- Angara River**, Siberia, 3-155
- Angel Falls**, Venezuela, 7-344, 352
- Angkor Thom**, ancient city of Cambodia, 4-225
- Angkor Vat**, temple, Cambodia, 4-222, \*224



# ALPHABETICAL INDEX

- Angles**, conquest of England by, 1-21, 24  
descendants in England, 1-25
- Anglesey Island**, Wales, 1-85, 87
- Anglo-Egyptian Sudan**, *see* Sudan
- Anglo-Saxons**  
in Ireland, 1-133
- Angola**, Africa, 5-174, \*183, \*185, 187  
facts and figures, 5-188
- Angostura Dam**, Bolivia, 7-118
- Animals**  
Ceylon, 4-181  
Malaya, 4-194-95  
Manchuria, 4-283  
*See also* names of animals
- Anjou, Count of**, king of Sicily, 2-377
- Ankara**, capital, Turkey, 3-247, 253, \*260
- Ankogel**, peak in Austrian Alps, 2-219
- Annam**, Indochinese state, 4-220, 223  
map, 4-217  
*See also* Indochina
- Annapolis**, Maryland, 6-202, \*335
- Anshan**, city, Manchuria, 4-269
- Antandroys**, people of Madagascar, 5-214
- Antarctica**, 7-221-36  
Chilean bases, 7-146-47  
Graham Land, 1-174  
map, 7-236
- Anti-Lebanon Mountains**, 3-287
- Antigua**, island in West Indies, 7-262, 74
- Antilles**, *see* West Indies
- Antiquities**, 7-249-64  
Athens, ruins of, 3-27-44  
*See also* Romans, ancient
- Antrim**, county, Northern Ireland, 1-119, \*134, \*143, \*153
- Antwerp**, port, Belgium, 1-215, \*\*220, \*226
- Apache Trail**, Arizona, 6-287
- Apaches**, American Indians, 6-28
- Apollo**, Greek god, temple at Corinth, 3-17
- Appalachian Mountains**  
United States, 6-170, 228
- Appenzell Valley**, Switzerland  
wayside cross, 2-269
- Applian Way**, Italy, 2-352
- Apple growing**  
Canada, Nova Scotia, 6-59
- Appleby**, town of England, 1-42
- Aqaba**, port, Jordan, 3-342
- Aqueducts**, ancient Roman, 2-350  
Mexico, 7-19  
Pont du Gard, near Nîmes, France, 1-262
- Arab Legion**, 3-343
- Arabia**, 3-361-83  
Bedouin family, 3-354  
Bedouin hair-style, 3-355  
desert, 7-338, 342  
horses and horsemen, Saudi Arabia, 3-350  
map, 3-365  
facts and figures, 3-383  
*See also* Arabs
- Arabs**  
Africa, 5-5, 8, 33  
Egypt, 5-82, 91  
Sahara Desert, 7-334  
conquest of Syria, 3-289  
Georgian Republic, 3-190  
power in Lebanon, 3-305  
*See also* Algeria; Arabia; Bedouins; Cairo; Iraq; Libya; Syria; Tunisia
- Arafat**, holy place of Arabia, caravan, 3-375
- Arakan Pagoda**, Mandalay, Burma, 4-157
- Aran Islands**, Ireland, 1-125, \*151, \*152
- Aranui Cave**, New Zealand, 5-362
- Ararat**, Mount, 3-181, \*182, 183
- Araucanians**, Chilean tribe, 7-138, 139
- Arawaks**, ancient tribes in West Indies, 7-65
- Arc de Triomphe**, Brussels, Belgium, 1-216-17
- Arc de Triomphe**, Paris, 1-290, \*302
- Arch of Caracalla**, Algeria, 5-44
- Archaeology**, 7-249-64  
Athens, ruins of, 3-27-44  
*See also* Romans, ancient
- Archangel**, city of Russia, 3-147
- Arc Castle**, Italy, 2-315
- Arctic regions**, 6-5-16, 148; 7-221  
explorations, 2-80, 87  
map, 6-6
- Ardashir II**, Persian king, sculpture of, 3-206
- Ardennes Forest**, Belgium-Holland, 1-214-15
- Ardfert**, town, Ireland, 1-139
- Arezzo**, town of Italy, 2-313
- Argentina**, 7-199-220  
map, 7-202  
facts and figures, 7-220
- Arizona**, state, 6-194, 272-94  
Canyon de Chelly, 6-272  
cities, 6-364, \*368, \*369  
desert, 7-334  
Grand Canyon, National Park, 6-381, 383, \*\*395; 7-323  
Indians, 6-25, \*\*274, \*\*275  
Montezuma Castle, 6-382  
facts and figures, 6-294
- Arkansas**, state, 6-245  
cities, 6-343, 348  
facts and figures, 6-248
- Arkansas River**, 7-330
- Armenia**, 3-181-92  
map, 3-183  
Russian part, 3-185  
facts and figures, 3-198
- Armoricans**, ancient people of Brittany, 1-269, 270
- Arnhem**, city, Netherlands, 1-193
- Artigas**, José Gervasio, Uruguayan patriot, 7-183-84, \*185
- Arts**  
Ireland, 1-148, 150-51  
North American Indians, 6-19, \*20, \*21, \*\*22, \*\*23, \*\*26, \*\*27, \*\*30, \*\*31  
Pacific islands, 5-303  
Uruguay, 7-189
- Aruba**, island, West Indies, 7-79, \*342
- Arundel**, town of England, 1-38
- Arundel Castle**, England, 1-39
- Aryans**, ancient people of India, 4-25, 28, 40
- Ascension Island**, 1-167, 170, \*176
- Ashanti**, Africa, 5-145, 147, \*\*160
- Ashkabad**, city of Turkmenistan, 3-175, 179
- Ashley River**, South Carolina, 6-239
- Ashurbanipal**, Assyrian king, palace of, 7-252, 253, 256
- Asia**, descriptive sketch, 4-5  
peoples of, 7-241-43  
For list of articles, *see* Tables of Contents, Volumes III, IV
- Asphalt**, 7-74  
Trinidad, 7-74  
Venezuela, 7-102
- Assam**, part of India, 4-25
- Assassins (Ismaili)**, Mohammedan sect, 3-297
- Asses**, *see* Donkeys
- Assiniboia**, district of Canada, 6-100
- Assiniboine**, Mount, Alberta, 6-406, \*408
- Assur**, capital of Assyria, 7-253
- Assyria**, art in, 3-221; 7-252, \*\*254, \*\*255, \*257, \*\*258  
empire, 3-217, 221; 7-253  
sphinxes of, 5-87
- Astronomers**, ancient Chinese, 4-321
- Asuncion**, capital, Paraguay, 7-173, \*173, \*177, 180, \*180
- Atacama Desert**, Chile, 7-134, 335
- Atacama Province**, Chile, 7-133
- Ataturk**, Kemal, 3-251, 253
- Athabaska River**, Canada, 7-405
- Athapascans**, Indian tribes, 7-359
- Athena**, Greek goddess, 3-29, \*\*36
- Athens**, capital of Greece, 3-7, \*\*9, \*14, 27-44
- Atitlán Lake**, Guatemala, 7-27
- Atlanta**, capital of Georgia, 6-241, 337, \*342
- Atlantic Charter**, 7-237
- Atlantic City**, New Jersey, 6-209
- Atlantic Ocean**, islands of, 1-157-76  
*See also* West Indies
- Atlantic Provinces**, Canada, 6-43-64
- Atlas Mountains**, 5-5, \*15
- Atolls**, formation, 5-277
- Atomic-energy plants**  
U.S.S.R., 3-155  
United States, 6-243, \*280
- Atomic submarines**, U.S.S. Nautilus, 7-279
- Atomic testing ground**, Frenchman's Flats, Nevada, 6-366
- Auckland**, city of New Zealand, 5-367-68, \*370
- Augusta**, capital of Maine, 6-323
- Aurangzeb**, Mogul ruler of India, 4-74
- Australasia**. For list of articles *see* Table of Contents, Volume V

# ALPHABETICAL INDEX

- Australia**, 5-322-47  
 aborigines, 5-348-57; 7-\*283  
 Antarctic station, 7-\*225  
 desert, 7-337  
 map, 5-\*325  
 New Guinea territory, 5-273  
 Pacific islands, 5-301  
 peoples of, 7-243  
 facts and figures, 5-347
- Austria**, 2-217-35  
 annexed by Germany, 2-109  
 control of Venice, 2-357  
 Hungary under, 2-237-38  
 losses in World War I, 3-109  
 map, 2-\*221  
 occupation after World War II, 2-235  
 rivalry with Prussia, 2-109  
 Slavic regions lost to, 3-57  
 Switzerland's struggles against, 2-264  
 union with nazi Germany, 2-109, 111  
 facts and figures, 2-235
- Automobile manufacture**  
 Italy, 2-\*328
- Avalanches**, Switzerland, 2-268  
*See also* Glaciers
- Aviation**  
 in Antarctica, 7-224, \*233  
*See also* Air service
- Avila**, city of Spain, 1-\*308
- Avon River**, England, 1-\*58
- Aymará**s, Indians of South America, 7-117, \*127, 128, 129, \*130
- Ayolas**, Juan de, early explorer in Paraguay, 7-172-73
- Ayudhya**, city of Siam, 4-\*200
- Azerbaijani Soviet Socialist Republic**, 3-194, 196
- Azerbaijan**, 3-181, \*187, \*188, 194-98  
 map, 3-\*183  
 facts and figures, 3-198
- Azores Islands**, North Atlantic, 1-157, \*158, 159, \*163, \*173, 175  
 facts and figures, 1-175
- Aztecs**, Indians of Mexico, 7-8-9, \*11
- B**
- Baalbek**, ancient city of Lebanon, 3-307, \*309
- Babylon**, ancient city, 7-253  
 Ishtar Gate, 3-\*220
- Babylonian Empire**, 3-217; 7-253
- Bacharach**, town of Germany, 2-\*125
- Badlands**, South Dakota, 6-\*269
- Baffin Island**, Eskimos, 6-\*14, \*150  
 glaciers, 6-5
- Baganda**, African tribe, 5-155
- Bagdad (Baghdad)**, capital of Iraq, 3-221, \*225, \*233, 237-46, \*242
- Bagpipes**, Scottish, 1-113
- Baguio**, resort in Philippines, 5-313
- Bahama Islands**, 7-\*78  
 facts and figures, 7-83
- Bahia**, Brazil, *see* Salvador
- Bahrain Islands**, Arabia, 3-\*372, 383
- Balkal Lake**, Siberia, 3-152, 153
- Balka**, African tribe, 5-155
- Baku**, city of Russia, 3-196  
 oil fields, 3-\*198
- Balboa**, Spanish explorer, 7-40-41
- Balboa Park**, San Diego, California, 6-\*372
- Baleatic Islands**, 1-369, \*371, \*382, 383
- Ball**, island of Indonesia, 5-\*238, \*239, \*240, \*243, 245, \*246, \*247, \*249, \*251, \*254  
 dancers, 5-\*244  
 Hindu temple, 5-\*249
- Balkan Mountains**, Bulgaria, 3-\*82
- Balkans**, *see* Albania; Bulgaria; Greece; Rumania; Yugoslavia
- Ballyvaunion**, Ireland, cliffs near, 1-\*142
- Balsa wood**, Ecuador, 7-\*113
- Baltic Sea**, 2-91
- Baltic States**, Esthonia (Estonia), Latvia, Lithuania, 2-173-90
- Baltimore**, city of Maryland, 6-221, \*335, 336
- Baluchistan**, part of Pakistan, 4-77, 80
- Bamboo**  
 houses, Philippines, 5-\*306  
 usefulness of, China, 4-281
- Bananas**, Guatemala, 7-\*30
- Banaras**, city, India, 4-\*64, \*65
- Banda Oriental**, early name of Uruguay, 7-183
- Bandar Shah**, port of Iran, 3-\*212
- Bandi**, people of French Equatorial Africa, 5-\*186
- Bandits**, Manchuria, 4-\*285  
 Mongols, 4-307  
*See also* Pirates
- Banff National Park**, Alberta, 6-\*110, 404, \*408, \*409, \*410, 414
- Banff-Windermere Highway**, Canada, 6-\*102
- Bangkok**, capital, Thailand, 4-198, \*201
- Menam River**, 4-\*202  
 royal palace, 4-\*206  
 temples, 4-\*211
- Bangor**, Pennsylvania, slate quarry, 6-213
- Bantus**, people of Africa, 5-158, 163, 187  
*See also* Zulus
- Banya Bashi mosque**, Sofia, 3-\*81, \*89
- Baras**, tribe of Madagascar, 5-211, 216
- Barbados**, West Indies, 7-\*77  
 facts and figures, 7-83
- Barbary States**, Africa, 5-5, 33; 7-\*332
- Barber**, street, Syria, 3-\*303
- Barcelona**, city of Spain, 1-\*317, 333, 336
- Barges**, Netherlands, 1-199, 202
- Barloche**, lake district, Argentina, 7-210, \*215
- Barley**, used in making malt, Finland, 2-\*51
- Barnsdall**, town, Oklahoma, 6-\*245
- Baroda**, India, elephants, 7-\*378
- Barrage d'Antelamita**, dam, Madagascar, 5-\*216
- Barranquilla**, city of Colombia, 7-105
- Barrier reefs**, 5-277
- Basil II**, Byzantine emperor, 3-83
- Basket-making**, Angola, Africa, 5-\*183  
 China, 4-\*276, \*281  
 Dominican Republic, 7-\*90  
 Pueblo Indians, 7-\*358  
 Sweden, 2-\*27
- Basques**, people of northern Spain, 1-324, \*329
- Basra**, city of Iraq, 3-\*231, 232, \*235
- Bastia**, Corsica, 1-\*372
- Basutoland**. Facts and figures, 5-210
- Bataán**, Philippine peninsula, 5-314
- Bataks**, people of Sumatra, 5-\*229, 245, 252
- Batalha**, Spain  
 St. Mary of the Victory Monastery, 1-\*349
- Batavia**, Java, *see* Jakarta
- Bath**, public, Bulgaria, 3-\*88
- Bathing**  
 steam baths, in Finland, 2-57
- Bathurst**, capital, Gambia, 5-150, \*150
- Batlle y Ordóñez**, Jose, Uruguayan leader, 7-184
- Baton Rouge**, capital of Louisiana, 6-\*347, 348
- Battle Creek**, city of Michigan, 6-\*352
- Bauxite**  
 Arkansas, 6-\*245  
 Gold Coast resources, 5-147  
 Surinam plant, 7-\*96
- Bavaria**, Germany, bride, 2-\*134  
 candy-making, 2-\*139  
 costumes, 2-\*126, \*133  
 lakeside chapel, 2-\*132  
 medieval town, 2-\*132  
 spinning, 7-\*353  
 wood carver, 2-\*129
- Bay of Whales**, Antarctica, 7-\*232
- Bay rum**, Virgin Islands, 7-74
- Bay Saint Louis**, Mississippi, 6-\*238
- Bayous**, Gulf of Mexico coast, 6-\*237
- Bayreuth**, town of Germany, 2-\*136  
 opera festival at, 2-119, 120
- Bays**, Lake of, Ontario, 6-\*83
- Bazaars**, Bahrain Islands, 3-\*372
- Cairo**, 5-100-01, \*112, \*124  
 Damascus, 3-303  
 Istanbul, 3-\*275
- Beacon Rock**, Washington State, 6-\*198
- Bean**, use in China, 4-283
- Bear Mountain Bridge**, New York State, 6-\*166
- Bear of Oakland**, ship, 7-\*221
- Beauvais**, town of France  
 tapestry-weaving, 1-\*236
- Beaver Lodge**, town of Saskatchewan, Canada, 6-\*40
- Bechuanaland Protectorate**, 5-201, 204, 206  
 facts and figures, 5-210
- Bedouins**, desert people  
 Algeria, 3-\*359  
 Arabia, 3-\*350, \*354, \*355, \*364, 380, 382  
 Jordan, 3-342  
 Lebanon, 3-\*313

# ALPHABETICAL INDEX

- Bedouins** (continued):  
 Syria, 2-297, 301  
 Tunis, 5-555
- Beefeaters**, English soldiers, 1-118, 25
- Behar**, India, *see* Bihar
- Beira**, Portuguese Mozambique port, 5-171
- Beirut**, capital of Lebanon, 3-307, 310, \*311, \*312, \*13
- Belem Tower**, Portugal, 1-364
- Belfast**, capital, Northern Ireland, 1-154
- Belgium**, 1-203-28  
 colonies, Congo, 5-173, \*175, \*176, 181, 182, \*184, 185, 188  
 map, 1-206  
 trust territory  
   Ruanda-Urundi, 5-177  
 facts and figures, 1-228
- Belgrade** (**Beograd**), capital of Yugoslavia, 3-73, 79
- Bell** (**Enchape**) **Rock lighthouse**, Scotland, 1-121
- Bellagio**, town, Italy, 2-299
- Ben Nevis**, mountain, Scotland, 1-116
- Ben Venue**, mountain in Scotland, 1-119
- Benares**, India, *see* Banaras
- Benbulbin**, mountain, Ireland, 1-149
- Bendern**, Liechtenstein, 2-288
- Benelux**, customs union of Belgium, Netherlands and Luxembourg, 1-228
- Bengal**, East Pakistan, 4-74-75, 77, 82, \*89, 96, \*96; 7-379  
 women, 4-81
- Berbers**, African people, 5-4, 5, 8  
*See also* Barbary States
- Berchtesgaden**, village of Germany, 2-138
- Bergen**, city of Norway, 2-15, 18  
 Hanseatic Wharf, 2-15
- Bermuda Islands**, 1-168, \*169, \*170, 173, 175, 176  
 facts and figures, 1-176
- Bermudez**, asphalt lake, Venezuela, 7-102
- Bern**, capital of Switzerland, 2-268, 271, \*275
- Bernese Oberland**, Switzerland, 2-262
- Bertoldo**, Italian folk tale, 2-316
- Berwick**, town of England, 1-47
- Bethlehem**, Jordan, 3-338, \*345
- Bethlehem**, Pennsylvania, 6-220
- Betrothal customs**  
 Kenya Colony, 5-156  
 Yugoslavia, 3-68, \*68
- Bétsiléo**, Plain of, Madagascar, 5-212
- Betsy Ross House**, Philadelphia, 6-164
- Bexhill-on-Sea**, England, 1-34
- Bevizit Meydan**, square, Istanbul, 3-2265
- Bhanda**, wandering musicians of India, 4-106
- Bhotias**, people of Nepal, 4-143
- Bhutan**, 4-119-48  
 facts and figures, 4-148
- Bible**, derivation of word, 3-305
- Bibliothèque Nationale**, Paris, 1-299
- Bihar**, India, Buddhist temple, 4-266
- Bijapur**, India, ruins, 4-248-249
- Bikini**, Pacific island, 5-277
- Binche**, Belgium, carnival, 1-218
- Bingham**, Utah, copper mine, 6-300
- Birds**, Antarctica, 1-174  
 Japan, 4-362  
 Madagascar, 5-219  
 Malaya, 4-195
- Birmingham**, city of Alabama, 6-338-39, \*342
- Biskra**, Algeria, oasis, 5-48
- Bismarck**, capital of North Dakota, 6-362
- Bitter oranges** (**petitgrain**), 7-171
- Black Forest**, Germany, costumes, 2-125, \*284
- Black Harbor**, New Brunswick, sardine fishing, 6-54
- Black Hills**, South Dakota, 6-267, 362
- Blankets**, Navaho, 6-19
- Blarney Castle**, Ireland, 1-135
- Blow-pipe**, weapon  
 Jivaro Indians, Ecuador, 7-114
- Blue Grotto**, Capri, 2-327
- Blue Nile**, river, 5-127-29
- Blue Mosque**, Cairo, Egypt, 5-116
- Blue Mosque**, Istanbul, 3-268, \*271
- Blue Mountains**, Australia, 5-323, \*324
- Boabdil**, Moorish king, 1-312
- Boats**  
 ancient and modern, 7-265-82  
 ancient Egypt, 5-72
- Boats** (continued):  
 Antwerp, Belgium, 1-220  
 Australian dugout, 5-348  
 balsas, South America, 7-128, \*316  
 basket boats (gufas), Iraq, 3-228, 229; 7-268  
 Bay of Naples, 2-314  
 Belgian Congo, 5-186  
 Ceylon, 4-168, \*178  
 China, 4-264, \*269, \*274  
 dugout canoes, 5-167; 7-12  
 Egypt, 5-102, \*108, \*125  
 Eskimos, 2-69; 6-29  
 fishing boats, Belgium, 1-213  
 fishing boats, Spain, 1-325  
 goatskin, Iraq, 3-224  
 houseboats, Egypt, 5-114  
   Kashmir, 4-115  
 Indian canoes, 6-29  
 Kon-Tiki, ocean-going raft, 7-272  
 Lebanon, 3-312-13  
 Lithuania, 2-183  
 lumber barge, India, 4-109  
 New Guinea, 5-273, 274  
 Nova Scotia fishing schooners, 6-44, 46  
 outrigger canoe, Papua, 7-271  
 Pacific, 5-283, \*285, 287, 295-96, \*303  
 Pakistan, 4-96  
 piragua, of Panama, 7-266  
 racing yachts, Rhode Island, 6-327  
 Rhodes, Island of, 3-22  
 river and canal craft, pioneer period, U. S., 6-179-81  
 river boats, Paris, 1-296-97  
 Sicily, 2-373, \*375  
 Singapore, Malaya, 4-190  
 skin boat, Tibet, 4-148  
 Solomon Islands, 7-281  
 stern wheeler, 6-256  
 tarboats, Finland, 2-53  
 Thailand, 4-201, \*202  
 trading boats, Celebes Island, 5-253  
 tugboat, 7-144  
 United States  
   bullboats, early transportation, 6-180  
   canoes, early transportation, 6-154  
   craft in pioneer period, 6-162  
   showboats, 6-183-84  
   steamboats, Mississippi River, 6-175, 181-83  
 Venice, Italy, 2-358, \*370  
*See also* Gondolas  
 Viking galleys, 2-6  
 water taxi, Burma, 4-160
- Boers**, people of South Africa, 5-189  
 trek to Transvaal, 5-195
- Boghaz-keul**, Hittite sculpture at, 7-257
- Bogotá**, capital of Colombia, 7-105, 107
- Bohemia**, Czechoslovakia, 2-194-95, 201, 208, \*209, \*211, \*214
- Bohemian bobbin lace**, 2-213
- Bois de Bologne**, wooded park, Paris, 1-302
- Boise**, capital of Idaho, 6-364, 366
- Bokhara** (**Bukara**), city of Turkestan, 3-165
- Bolan Pass**, Afghanistan, 4-4
- Bolívar**, **Simón**, South American liberator, 7-101, \*101
- Bolivia**, 7-116-17, 125-32  
 reed boat, Lake Titicaca, 7-274  
 facts and figures, 7-132
- Bolshevism**, *see* Communism
- Bombay**, city, India, 4-47, 58  
 cotton mill, 4-37
- Bonaire**, Dutch West Indies, 7-75
- Book of Kells**, Irish illuminated manuscript, 1-150-51
- Books**, ancient, Ethiopia, 5-132
- Boom**, city, Belgium, 1-221
- Boomerangs**, of Australian aborigines, 5-351, \*356
- Boone**, **Daniel**, American frontiersman, 6-169, 171  
 Boone Homestead, Reading, Pennsylvania, 6-171
- Boot Hill Graveyard**, Tombstone, Arizona, 6-194
- Borchgrevink**, Norwegian explorer, 7-223
- Borders**, region of Scotland, 1-124
- Borga**, town in Finland, 2-60

# ALPHABETICAL INDEX

- Borneo**, 5-257-70  
 map, 5-224  
 facts and figures, 5-270  
**Boro Budur**, Java, ruins of ancient temple, 5-237, 245  
**Bororos**, Indians of Brazil, 7-159  
**Borrow, George**, writer about gipsies, 7-297  
**Bosnia**, part of Yugoslavia, 3-57, \*\*58, \*\*59, \*\*62, 79  
 map, 3-69  
 mountain scene, 3-358  
 Pliva River cascades, 7-3350  
 sheep market, 3-359  
**Bosporus Strait**, 3-272-73, 279  
*See also* Golden Horn  
**Boston**, Massachusetts, 6-161, 318, 323-24, 326  
**Bothnia**, Gulf of, 2-57  
**Bougainville**, Pacific island, 5-285  
**Bourgeau**, peak in Massive Range, Canada, 6-102  
**Bourse de Commerce**, Paris, 1-299, 299  
**Bow River**, Alberta, 6-110, 140  
**Boys Town**, Nebraska, 6-255  
**Brabangon horses**, 1-227  
**Brahmaputra River**, 4-25  
**Brahminism**, *see* Hinduism  
**Bratislava**, Czechoslovakia, 2-202  
**Brazil**, 7-148-69, 269  
 Amazon River, 7-320  
 cities, 7-152, 154, \*\*157, \*\*160-61, \*\*164, \*\*168  
 early relations with Uruguay, 7-183-84  
 map, 7-150  
 facts and figures, 7-169  
**Bread-making**, Czechoslovakia, 2-205  
 Lebanon, 3-306  
**Breadfruit**, 5-289-91  
**Bremen**, port of Germany, 2-111  
**Bretons**, people of Brittany, *see* Brittany  
**Brian Boru**, Irish hero, 1-133, 136  
**Brick-making**  
 Mexico, 7-20  
**Bridal Veil Falls**, Yosemite National Park, 6-378  
**Bridges**  
 Bear Mountain Bridge, New York State, 6-166  
 Belgium, 1-225  
 Bridge of Sighs, Venice, 2-364  
 Budapest, Hungary, 2-248  
 Charles, Prague, 2-215  
 Chesapeake Bay, Maryland, 6-202  
 covered wooden, Liechtenstein, 2-288  
 Galata Bridge, Istanbul, 3-278  
 Golden Gate Bridge, California, 6-321, 366, 368  
 Ireland, 1-143  
 Ismail Pasha, Cairo, Egypt, 5-129  
 Jacksonville, Florida, 6-345  
 King Feisal I, Bagdad, 3-242  
 Louisville, Kentucky, 6-347  
 Mechelen, Belgium, 1-222  
 Nile, 5-121  
 of boats, over Tigris River, 3-226  
 Oporto, Portugal, 1-352  
 over chasm, Ronda, Spain, 1-306  
 over Chicago River, 6-351  
 over Danube, at Cernavoda, Rumania, 3-110  
 over Forth and Tay, Scotland, 1-121  
 over Jhelum, Kashmir, 4-109  
 over Rhumel River, Algeria, 7-327  
 over Royal Gorge, Arkansas River, 7-330  
 Peace Bridge, Frankfurt-on-Main, Germany, 2-114  
 Ponte Vecchio, Florence, Italy, 2-320  
 pontoon type, 6-375  
 Pulaski Skyway, New Jersey, 6-332  
 Roman, over Jordan River, 3-333  
 Scotland, 1-114  
 Sydney Harbor, 5-336  
 Tower Bridge, London, 1-178  
 Venice, 2-355, 357, 364  
 Wales, 1-85  
 wrought-iron railroad, Wales, 1-88-89  
**Brighton**, resort town of England, 1-37, 38  
**Briksdal Glacier**, Norway, 7-352  
**Bristol**, city of England, 1-40  
**British Columbia**, province of Canada, 6-41, 97-120, 136, 141, 142, 142-43, 143  
 national parks, 6-401, 406, 410, 413, 416, 431  
**British Columbia** (continued):  
 provincial parks, 6-429  
 facts and figures, 6-120  
**British Commonwealth**, *see* Commonwealth of Nations  
**British Guiana**, 7-95, 96, 104  
 facts and figures, 7-104  
**British Isles**, *see* Great Britain  
**British Museum**, London, 1-80, 84  
**British West Indies**, *see* Commonwealth of Nations—West Indies  
**Britons**, early people of England, 1-15  
**Brittany**, province of France, 1-266-87  
 costume, 1-233  
 megalithic remains, 7-261, \*\*263  
 spinning, 7-357  
**Brock, Sir Isaac**, Canadian leader, 6-96  
**Broken Hill**, mining area, Northern Rhodesia, 6-163  
**Bromo**, volcano, Java, 7-336  
**Brooke, James**, rajah of Sarawak, 5-261, 264  
**Brown, John**, raid at Harper's Ferry, 6-230  
**Bruges**, city, Belgium, 1-204, \*\*205, 215  
 lace-making, 1-214, \*\*224  
**Brunbies**, Australian wild horses, 5-337  
**Brunel**, state in Borneo, 5-264, 270  
**Brunnen**, Swiss port, 2-266  
**Brussels**, capital, Belgium, 1-215  
 flower market, 1-209  
 Grand' Place, 1-209  
 Guild Houses, 1-208  
 Palais du Cinquantenaire, 1-216-17  
 Place de Brouckere, 1-203  
 Town Hall, 1-210  
**Bruton Parish Church**, Williamsburg, Virginia, 6-235  
**Bryce Canyon National Park**, Utah, 6-399  
**Buchanan**, Liberian seaport, 5-135  
**Bucharest**, capital, Rumania, 3-111, 112, 116, 124  
**Buck, Sir Peter**, New Zealand scientist, 5-376  
**Buckeburg**, town in Germany, costume of, 2-127  
**Buckie**, Scotland, 1-121  
**Buckingham Palace**, London, 1-82  
**Budapest**, Hungary, 2-236, 237, 240  
 market, 2-248  
 suspension bridge, 2-248  
 workers' club, 2-246  
**Buddh Gaya Temple**, Bihar, India, 4-60  
**Buddha**, religious leader  
 bronze image, Kamakura, Japan, 4-360  
 gigantic image, Ceylon, 4-179  
 Rangoon, Burma, 4-159  
 Great Buddha, Japan, 4-360  
 image of, Thailand, 4-200  
 reincarnation, 4-133, 137  
 relics of, 4-184; 7-369  
*See also* Buddhism  
**Buddhism**, religion  
 Burma, 4-162, 163  
 Ceylon, 4-176  
 China, 4-254, 257, 265, 297, 307, 324  
 Japan, 4-346, 356, 360, 360  
 Mongolia, 4-315  
 pagoda near Lashio, Burma, 4-154  
 Shwe Dagon pagoda, Burma, 4-158  
 Sinkiang, 4-300  
 temple at Bihar, India, 4-60  
 at Taipei, Formosa, 4-244  
 in Khatmandu Valley, Nepal, 4-135  
 of the Tooth, Ceylon, 7-369  
 Thailand, 4-197-98, \*\*211  
*See also* Buddha; Lamaism  
**Buenos Aires**, capital, Argentina, 7-199, 200, \*\*204, \*\*205, 210, 211, 215, 217  
**Buenos Aires**, province, Argentina, 7-218  
**Buffalo**, city of New York, 6-330, 333  
**Buffalo Bill**, Pony Express rider, 6-193  
**Buffalo National Park**, Alberta, 6-419, 420, 422  
**Buffalo skull**, Brigham Young inscription, 6-181  
**Buffaloes**  
 Canada, 6-418  
 Indonesia, 5-235  
*See also* Water buffaloes  
**Buganda**, territory, Uganda, 5-155  
**Bukarest**, *see* Bucharest  
**Bukhara (Bokhara)**, city of Turkestan, 3-167, 170, 177

# ALPHABETICAL INDEX

- Bulawayo**, town, Southern Rhodesia, 5-169  
**Bulb-raising**, Netherlands, 1-198, \*202  
**Bulgaria**, 3-81-104  
 Isker River, 7-\*\*\*28, \*\*29  
 For Facts and Figures, *see* Statistical Summary, 3-104  
**Bullboats**, 6-180  
**Bullfighting**, Spain, 1-\*\*\*340  
**Bullocks**, as draught animals, *see* Oxen  
**Buna River**, 7-\*\*\*319  
**Bunyan, Paul**, mythical lumberjack, 6-194  
**Burial customs**  
 China, 4-265  
 Egypt, 5-57, \*\*63, \*\*66, \*\*67, \*\*70, 72, 87  
 Mongolia, 4-316  
 Paraguay, 7-\*\*\*174  
 Turkey, 3-\*\*\*276  
 Venice, 2-363, 366  
**Buriats**, people of Siberia, 3-\*\*\*150  
**Burlington**, Vermont, 6-323, \*325  
**Burma**, 4-149-64  
 elephants, 7-371, \*372, 375  
 map, 4-\*\*\*150  
 facts and figures, 4-164  
**Burns Lake**, B. C., Canada, 6-\*\*\*109  
**Bursa** (or **Brusa**), city of Turkey, 3-\*\*\*256  
**Rushmen**, South Africa, 5-201, 204, 206  
**Bushnell, David**, inventor of submarine, 7-279  
**Butte**, city of Montana, 6-363, \*364  
**Butter-making**  
 New Zealand, 5-\*\*\*365  
 United States, 6-254  
**Byblos**, ancient city of Lebanon, 3-305  
**Bygdø Peninsula**, Oslo, Norway, 2-6-7  
**Byrd, Richard E.**, explorations in Antarctica, 7-224, 228  
 Bear of Oakland, ship, 7-\*\*\*221  
**Bytown**, original name of Ottawa, Canada, 6-94  
**Byzantium (Constantinople)**  
 and ancient Greece, 3-7  
 wars with Bulgaria, 3-83  
*See also* Constantinople; Istanbul
- C**
- Cabeza de Vaca, Alvar Nuñez**, early ruler in Paraguay, 7-173  
**Cacao**  
 Brazil, 7-163  
 Ecuador, 7-111  
 West Indies, 7-91  
**Cactus**, Arizona, 6-\*\*\*287; 7-\*\*\*334  
**Cader Idris Mountains**, Wales, 1-\*\*\*86  
**Caerfyrddin** (Carmarthen), Wales, 1-92  
**Caguas**, city of Puerto Rico, 7-\*\*\*80  
**Cairo**, capital, Egypt, 5-\*\*\*101, 105-26  
**Caius Cestius**, Pyramid of, 2-\*\*\*53  
**Calabria**, region, Italy, 2-302, \*328  
**Calcutta**, city, India, 4-58  
**Caldas da Reinha**, town of Portugal, 1-\*\*\*365  
**Calea Victorei**, street in Bucharest, 3-\*\*\*124  
**Calgary**, city of Alberta, Canada, 6-\*\*\*38, 135, \*140  
**California**, state, 6-\*\*\*196, 273-94, \*\*303, \*321, \*322, \*384  
 cities, 6-366, 368, \*371, \*372, \*373  
 gold rush, 6-184  
 national parks, 6-377-80, 383, 388, \*\*394, \*397  
**Calypso**, form of West Indian music, 7-71  
**Camacha**, village of Madeira Islands, 1-\*\*\*160  
**Camagüey**, province of Cuba, 7-53  
**Camagüey**, town of Cuba, 7-53  
**Cambodia**  
 Angkor Vat, 4-\*\*\*222, \*224  
 map, 4-\*\*\*217  
*See also* Indochina  
**Cambridge**, city of Massachusetts, 6-\*\*\*206, \*\*223  
**Cambridge University**, England, 1-\*\*\*53  
**Camels**, 7-307  
 Arabia, 3-\*\*\*363, \*\*375, 382  
 Canary Islands, 1-\*\*\*162  
 China, 4-\*\*\*291  
 Egypt, 5-97  
 Ethiopia, 5-\*\*\*134  
 Lebanon, 3-\*\*\*313  
 Mongolia, 4-303, 305  
 North Africa, 5-48, \*\*54  
 of Bedouins, 3-\*\*\*348, \*\*349, 354-55  
 Syria, 3-\*\*\*288  
 Turkestan, 3-\*\*\*172, \*180  
 Cameroons, British Africa, 5-141, \*178  
 facts and figures, 5-172  
 Cameroons, French Africa, 5-22, 32, \*178  
**Campagna**, Italy, 2-335  
**Campanile of St. Mark**, Venice, 2-\*\*\*354, \*\*369  
**Campeche**, port of Mexico, 7-\*\*\*16  
**Campchor production**  
 Formosa, 4-233, 243-44, \*247  
**Canada**, 6-33-42  
 Arctic regions, 6-148  
 Atlantic Provinces, 6-43-64  
 British Columbia, province, 6-97-120  
 cities, 6-121-43  
 early exploration, 6-145  
 historic sites, 6-425-26, 431  
 Indians, 6-17-32, 45, 148-49, 151  
 map, 6-\*\*\*35  
 national parks, 6-\*\*\*110, 401-25, 431  
 Niagara Falls, 7-343, 345  
 northern regions, 6-5-16  
 map, 6-\*\*\*6  
 Ontario, province, 6-81-96  
 Prairie Provinces (Alberta, Manitoba, Saskatchewan), 6-7, \*24, 97-120  
 provincial parks, 6-426-32  
 Quebec, province, 6-65-80  
 transportation, 7-\*\*\*312  
 Yoho National Park, 7-\*\*\*326  
 Yukon and Northwest Territories, 6-144-52  
 facts and figures, 6-42, 432  
**Canadian National Railways**, 6-104  
**Canadian Shield** (Laurentian Plateau), 6-36, 147  
**Canal Zone** (Panama), facts and figures, 7-42  
**Canals**  
 Aden, 3-\*\*\*381  
 Belgium, 1-\*\*\*204, \*\*212, \*215  
 Canada, 6-81, \*\*91  
 China, 4-\*\*\*274  
 England, 1-\*\*\*60  
 India, 4-\*\*\*28, 112  
 Iraq, 3-\*\*\*235  
 Netherlands, 1-\*\*\*179, \*180, \*\*182, \*184, \*\*191, \*199, \*\*200  
 Panama, 7-\*\*\*37, 41  
 Rumania, 3-111  
 Sweden, 2-32  
 Tokyo, Japan, 4-365  
 United States, 6-179, \*253  
 Venice, 2-355, 360, \*\*361, \*363, \*\*364, \*\*365, 366, \*368, \*370  
**Canary Islands**, 1-162-64, \*171  
 facts and figures, 1-176  
**Canberra**, capital of Australia, 5-\*\*\*338, 340  
**Candy-making**, Germany, 2-\*\*\*139  
**Cannes**, resort town, France, 1-\*\*\*261  
**Canning industry**, Baltimore, Maryland, 6-221  
**Cano Castle**, Spain, 1-\*\*\*321  
**Canoes**, *see* Boats  
**Canterbury**, town of England, 1-33  
**Canterbury Cathedral**, England, 1-\*\*\*31  
**Canyon de Chelly**, Arizona, 6-\*\*\*272  
**Cap Haitien**, ruined fortress, Haiti, 7-86  
**Cape**, *see* under word following cape; as Blomidon, Cape  
**Cape Breton Highlands National Park**, Nova Scotia, 6-423, \*426, \*427  
**Cape Breton Island**, Canada, 6-43-44, 46, 48  
**Cape of Good Hope**, 5-189  
**Cape of Good Hope**, province, South Africa, 5-189, 195, \*196  
**Cape Town**, city of South Africa, 5-189, \*190  
**Cape Town, University of**, 5-\*\*\*202  
**Cape Verde Islands**, 1-164, 167  
 facts and figures, 1-176  
**Capet, Hugh**, king of France, 1-232  
**Capitol**, Washington, D. C., 6-\*\*\*192  
**Capitol Park**, Phoenix, Arizona, 6-\*\*\*369  
**Capitoline Hill**, Rome, 2-\*\*\*341, 351  
**Cappadocia**, Turkey, cave villages, 3-\*\*\*250  
**Capri**, Italian pleasure resort, 2-\*\*\*327  
**Caps**, headdresses, 7-286, 289  
**Carabaos**, *see* Water buffaloes  
**Caracas**, capital of Venezuela, 7-99, 101, \*101  
**Caravans**  
 donkeys, 7-\*\*\*315  
 Gobi, 4-303, 305  
 Sinkiang (Sin-Kiang), 4-\*\*\*291  
 Turkestan, 3-\*\*\*172  
*See also* Camels  
**Caravansary** (inn), Turkestan, 3-\*\*\*172



# ALPHABETICAL INDEX

- Carchemish**, city of Hittites, 7-257  
**Cardiff**, city of Wales, 1-96  
**Caribbean Sea**, 7-25  
 harbor of Cartagena, 7-107  
 islands, 7-43-93  
 map, 7-65  
**Caribs**, West Indies aborigines, 7-65  
**Carillons**, in Belgium, 1-227  
**Carinthia**, castle near Launsdorf, 2-218  
 town of England, 1-47  
**Carlisle**, town of England, 1-47  
**Carlsbad Caverns**, New Mexico, 6-392, \*396  
**Cardiganshire**, Wales, 1-118, 92  
**Carnac**, Brittany, Stone Age ruins, 7-261, \*\*263  
**Carnarvon Castle**, Wales, 1-91  
**Carnivals**  
 Bushman's Carnival, Australia, 5-337  
*See also Festivals*  
**Caroline Islands**, 5-285-86, \*296  
 facts and figures, 5-301  
**Carpathian Mountains**, 2-153; 3-119  
 Czechoslovakia, costumes, 2-192, \*\*193  
 High Tatra, 2-155  
**Carpet**, The Holy, Moslem, 5-110  
**Carpet-making**  
 Iran, 3-207  
 Oriental, 7-362  
**Carrasco Airport**, Uruguay, 7-198  
**Carreg Cennan**, castle, Wales, 1-118  
**Carreta, La**, monument, Montevideo, 7-189  
**Carriek-a-Rede**, chasm, Ireland, 1-143  
**Carson, Kit (Christopher)**, stage driver, 6-193  
**Carson City**, capital of Nevada, 6-370  
**Carstensz, Mt.**, New Guinea, 5-271  
**Cartagena**, Colombia, 7-107  
**Carthage**, ancient city of Africa, 2-335  
**Cartier, Jacques**, memorial to, 6-430  
**Cartography**, 1-11-13  
**Carts**, *see* Wagons  
**Casa Loma**, Toronto, 6-128  
**Casablanca**, city of French Morocco, 5-6, \*6  
**Cashel**, town, Ireland, 1-131  
**Castes**, in India, 4-19, 28  
 Rajputs, 4-50  
**Castile**, Spain, washerwomen, 1-341  
**Castile Mountain**, Alberta, 6-410  
**Castles**  
 Arco, Italy, 2-315  
 Carnarvon, Wales, 1-91  
 Carreg Cennan, Wales, 1-118  
 Chillon, Switzerland, 2-274  
 Conway, Wales, 1-88-89  
 Crusaders', Lebanon, 3-308  
 England, 1-33-34, 38, \*39, 47  
 Heidelberg, Germany, 2-128  
 Hohenzollern, Berlin, 2-146-47  
 Ireland, 1-134, \*\*135  
 Japan, 4-340  
 Kronborg, Denmark, 2-97, \*99  
 Olavinlinna, Finland, 2-52  
 Pena, Portugal, 1-350  
 Rheinstein, Germany, 2-124  
 Rumeli, Turkey, 3-272-73  
 Vittskovle, Sweden, 2-29  
 Wales, 1-85-86  
*See also Châteaux*  
**Castor and Pollux**, Temple of, Rome, 2-347  
**Catacombs**, Paris, 1-292  
**Catalonia**, Spain, 1-332, 333  
**Catamaran**, two-hulled boat, origin of word, 7-265, 267  
**Cataracts**, *see* Waterfalls  
**Cathedral Mount**, British Columbia, 6-406  
**Cathedrals**  
 Argentina, 7-214  
 Canterbury, England, 1-331  
 Chartres, France, 1-235  
 Cologne, Germany, 2-121  
 Cordova, Spain, 1-309, 312, \*\*314  
 Durham, England, 1-43  
 England, 1-33, 38, 43-46, 48  
 Exeter, England, 1-52  
 Florence, Italy, 2-333  
 France, 1-273, \*279  
 Giralda, Seville, Spain, 1-316  
 Gothic, France, 1-240, 245-46  
 Havana, 7-57  
 Ireland, 1-131  
 Lincoln, England, 1-47  
 Mexico City, 7-3  
 Milan, Italy, 2-303  
 Notre Dame de Paris, 1-292  
**Cathedrals (continued)**  
 ruins on Cashel Rock, Ireland, 1-131  
 St. Alexander Nevski, Sofia, 3-81, \*86  
 St. Basil (Vasili the Beatified), Moscow, Russia, 3-156  
 St. Mark's, Venice, 2-366-67, \*367, \*\*369  
 St. Paul's, London, 1-67, 73  
 St. Stefan's, Zagreb, 3-75  
 Santo Domingo, 7-92  
 Sicily, 2-382  
 Strasbourg, France, 1-239  
 Truro, England, 1-41  
 Utrecht, Netherlands, 1-200  
*See also Churches*  
**Catt, Carrie Chapman**, American reformer, 6-264  
**Cattaro (Kotor)**, port of Dalmatia, 3-60  
**Cattle**  
 Argentina, 7-207, 215  
 Australia, 5-337  
 Brazil, 7-163  
 Canada, 6-88  
 Cuba, 7-45, 53  
 Czechoslovakia, 2-211  
 French Alps, 1-241  
 Hawaii, 6-308  
 Hebrides, Scotland, 1-122  
 Hungary, 2-239, \*242  
 Madagascar, 5-213, 218  
 New Zealand, 5-367  
 Paraguay, 7-180, 182  
 Russia, 3-133  
 Scotland, 1-111, 117  
 Turkey, 3-254  
 United States, 6-217, \*277, 292, 363  
 Uruguay, 7-186, 190  
 vaccination of, Afghanistan, 4-10  
 wild, England, 1-47  
*See also Dairying, Oxen*  
**Caucasus Mountains**, road, 3-185, \*193  
**Caudefec-en-Caux**, town of France, 1-283  
**Cauhinawaga Indians**, Canada, 6-21  
**Cave-dwellers**, 3-250  
**Caves**  
 Crystal Cave, Bermuda Islands, 1-168  
 New Zealand, 5-362  
 United States, 6-392-93, \*396  
**Cayenne**, capital of French Guiana, 7-96, \*98  
**Cedar River**, Iowa, bluffs, 6-263  
**Cedars of Lebanon**, 3-308, 310, \*321  
**Cefalu**, town of Sicily, 2-379  
**Celebes Island**, East Indies, 5-234, \*248, 253, \*253, 256  
**Celts**, ancient people of northwestern Europe, 1-128, 261, \*\*262  
 in Wales, 1-86-88  
 sculpture, 1-37  
**Central African Federation**, 5-163, 169, \*170, 171, \*171  
 facts and figures, 5-172  
**Central America**, 7-25-42  
 facts and figures, 7-42  
*See also Latin America*  
**Central Valley**, Chile, 7-136-37  
**Ceram Island**, Indonesia, 5-256  
**Ceramics**, *see* Pottery  
**Cereals**  
 Italy, 2-305  
**Cernavoda**, bridge over Danube, 3-110  
**Cerro de Pasco**, Perú copper mines, 7-121, \*124  
**Cetinje**, city, Yugoslavia, 3-60  
**Ceylon**, 4-165-84; 7-370  
 map, 4-166  
 facts and figures, 4-184  
**Chaco**, region of Paraguay, 7-170, 171, \*176  
**Chaco Boreal**, Argentina, 7-210, 214  
**Chad**, French Africa, 5-187  
**Chaggas**, African tribe, 5-158  
**Chalk cliffs**, England, 1-554  
**Chalk River**, Ontario, atomic-energy plant, 6-38  
**Chambord Château**, France, 1-236  
**Chamonix**, French Alpine resort, 1-254  
**Chamonix Valley**, France, 1-240  
**Champlain, Samuel de**, French explorer, 6-127, 380  
 settlement of Quebec, 6-73, 76  
**Champs-Élysées**, avenue in Paris, 1-295, \*302  
**Channel Islands**, 1-41, 64  
**Chantilly, Château of**, France, 1-302  
**Charlemagne**, Frankish emperor, 1-232; 2-288

# ALPHABETICAL INDEX

- Charles Bridge**, Prague, 2-215  
**Charles V**, Holy Roman emperor, 1-313  
**Charleston**, South Carolina, 6-239, 337, \*340  
**Charleston**, West Virginia, 6-337, \*337  
**Charlotte**, North Carolina, 6-338  
**Charlotte Amalie**, capital of Virgin Islands, 7-67, \*68  
**Charlottetown**, city of Prince Edward Island, 6-46, 121-22, \*125  
**Chartres**, French cathedral town, 1-235  
**Châteaux**  
   De Ramezay, Montreal, 6-66  
   Frontenac, Quebec City, 6-73, \*126  
   *See also* Castles  
**Chatham Islands**, 5-379  
**Chattanooga**, Tennessee, 6-339  
   Lookout Mountain, 6-227, \*339  
**Cheese**, auctioning of, Switzerland, 2-272  
   Danish cheese-making, 2-101  
   Italy, 2-326  
   making cheese in Wisconsin, 6-264  
**Cheese market**, Alkmaar, Netherlands, 1-177, \*186  
**Cheltenham**, town of England, 1-44  
**Chenau Hydro-Electric Station**, Canada, 6-84  
**Cheops**, *see* Khufu  
**Cherokees**, American Indians, 6-24  
**Chesapeake Bay**, Maryland, 6-202  
**Chew House**, Germantown, Pennsylvania, 6-222  
**Cheyenne**, capital of Wyoming, 6-363, \*368  
**Chiang Kai-shek**, Chinese leader, 4-252, 257  
**Chiangmai**, town, Thailand, 4-204, \*208  
**Chicago**, Illinois, 6-255-56, \*320, \*350, \*351, 352-53  
**Chichen Itza**, ancient Mayan city, Mexico, 7-11  
**Chichester**, town of England, 1-36, 38  
**Chile**, 7-133-47  
   woman with manto, 7-290  
   facts and figures, 7-147  
**Chillon**, Castle of, Switzerland, 2-274  
**Chiloé Islands**, Chile, 7-138  
**Chimborazo**, extinct volcano, Ecuador, 7-109  
**China**, 4-249-81  
   Communists in Korean conflict, 4-333  
   early shipbuilding, 7-270  
   map, 4-286-87  
   Mongol empire of Kublai Khan, 2-358-60  
   Mongolia, 4-303-16  
   Peking (Peiping), 4-317-32  
   relations with Formosa, 4-233-34  
   relations with Tibet, 4-119  
   Sinkiang (Chinese Turkestan), 4-289-302  
   weaving, 7-362, 365, \*367  
   Yangtze Kiang, river, 7-320  
   facts and figures, 4-287-88  
**China, Great Wall of**, 4-250, 252, \*278  
**Chinese**, in British Columbia, 6-117  
   in Indonesia, 5-236  
   *See also* China  
**Chita**, city, Siberia, 3-152, 155  
**Chitral**, central Asia, glacier, 4-229  
**Choctaw**, house, Natchez, Mississippi, 6-174  
**Cholon**, city of Indochina, 4-226  
**Chosen**, *see* Korea  
**Christ of the Andes**, statue, 7-138  
**Christchurch**, city of New Zealand, 5-368, \*372  
**Christianity**, Albania, 3-53  
   brought to Korea, 4-380  
   Egypt, 5-94  
   established in France, 1-231  
   Ethiopia, 5-131  
   Hungarians converted, 2-237  
   Ireland, 1-128-29, 133, 137  
   India, 4-40  
   introduced in Wales, 1-87-88  
   Japan, 4-352  
   Lebanon, 3-312-13  
   New Guinea, 5-274  
   Pacific islands, 5-297, 300  
   Paraguay, 7-174-75, 179  
   Philippines, 5-316, 318  
   Rome as center, 2-335  
**Christmas customs**  
   Sweden, 2-30  
**Christophe, Henri**, king of Haiti, 7-86  
   citadel of, 7-88  
**Chromite**, mineral, Pakistan production, 4-80  
**Chunchos**, Indians of Peru, 7-316  
**Chungking**, city of China, 4-257  
**Chuquicamata**, Chile, copper mines, 7-146  
**Churches**  
   Black Mosque, Sofia, 3-81  
   Brazil, 7-148  
   country church, Rajamak, Finland, 2-64  
   Greek Orthodox, Albania, 3-47  
   in the Garden of Gethsemane, 3-343  
   Ireland, 1-129  
   Lourdes Basilica, France, 1-257  
   Mexico, 7-9, 11  
   Mormon Tabernacle, Utah, 6-367  
   on birthplace of Christ, 3-338  
   Our Lady of Penha, Brazil, 7-164  
   Philippines, 5-314  
   Raskospalota, Hungary, 2-249  
   Rumania, 3-111  
   St. Anthony, Padua, Italy, 2-312  
   St. George Chapel, Sofia, 3-81  
   Saint-Gervais, Paris, 1-299  
   St. James, on St. Helena, 1-166  
   St. Maria della Salute, Venice, 2-363  
   St. Michel d'Aiguille, France, 1-251  
   St. Peter's, Rome, 2-339, 351  
   San Giorgio Maggiore, Venice, 2-370  
   San Xavier del Bac, Arizona, 6-368  
   Scotland, 1-119, \*114  
   Suurkirkko, Finland, 2-65  
   Winchelsea, England, 1-33  
   World Church of Peace, Hiroshima, Japan, 4-353  
   *See also* Cathedrals  
**Churchill Downs**, Kentucky, 6-240  
**Cilicia**, Plains of, Turkey, 3-254  
**Cincinnati**, city of Ohio, 6-350, \*355  
**Cincinnati University of**, 6-355  
**Cinque Ports**, England, 1-33  
**Cintra**, city of Portugal  
   fountain, 1-366  
**Circus elephants**, 7-380, \*381  
**Citadel (El-Kala)**, Cairo, 5-107  
**Citadel**, fortifications, Quebec, 6-36  
**Citadel of Henri Christophe**, Haiti, 7-88  
**Citizenship**  
   Uruguay, 7-196  
**Ciudad Trujillo**, capital of Dominican Republic, 7-91, \*92  
**Clark, William**, explorer of Oregon country, 6-281, 284  
**Clear Lake**, Manitoba, 6-422  
**Clermont**, first steamboat, 7-272  
**Cleveland**, city of Ohio, 6-350, \*355  
**Cliff dwellings**, Arizona, 6-272  
   Colorado, 6-383  
   Montezuma Castle, Arizona, 6-382  
**Climate**  
   Argentina, 7-200  
   Belgium, 1-214-15  
   Brazil, 7-149, 151  
   British East Africa, 5-151  
   British West Africa, 5-142  
   Chile, 7-133, 136-37  
   Gambia, 5-150  
   India, 4-22, 25  
   Ireland, 1-125  
   Italy, 2-299, 302  
   Kenya, 5-152  
   New Guinea, 5-271  
   North America, northern part, 6-5-9  
   Pacific islands, 5-281  
   Pakistan, 4-75, 77  
   Paraguay, 7-171  
   Scotland, 1-120  
   Siberia, 3-152  
   Sudan, 5-127-28  
   Turkey, 3-253  
   Uruguay, 7-187  
**Clipper ships**, 7-271-72, \*275  
**Clock Tower**, Venice, 2-354  
**Clocks**, Venice, 2-367, 370  
**Cloth**, *see* Weaving  
**Clothing**, *see* Costumes  
**Cloud Tower**, Peking, China, 4-323  
**Cloves**, 5-159, \*159  
**Clovis**, early French ruler, 1-231  
**Cluj**, city, Rumania, 3-112  
**Clyde Valley**, Scotland, 1-97, 100-01  
**Cnossus**, Crete, ruins, 7-257  
**Coal**  
   Australia, 5-332  
   Belgium, 1-218  
   Canada, 6-48

# ALPHABETICAL INDEX

- Coal** (*continued*):  
 Formosa, 4-240  
 France, 1-262  
 Germany, 2-119  
 Mexico, 7-14  
 Pennsylvania, 6-213, 220  
 Southern Rhodesia, 5-169  
 Wales, 1-93-94, \*95  
**Coast Range**, British Columbia, Canada, 6-112  
**Cobalt**, Ontario, Canada, silver mines, 6-84, 92  
**Cobalt River**, Ontario, Canada, 6-82  
**Cochin China**, 4-228-32  
 map, 4-217  
**Cockles** (*mollusks*), Welsh women preparing, 1-93  
**Cocoa**, Brazil, 7-148  
 Gold Coast, 5-144, 147  
 Nigeria, 5-143  
 West Indies, 7-72  
**Coconuts**, 5-290-91, \*297  
 Australia, 5-350  
 Philippines, 5-320  
**Coccyra**, *see* Corfu  
**Cody, William**, Pony Express rider, 6-193  
**Cody**, city of Wyoming, 6-363  
**Coffee**  
 Brazil, 7-149, \*\*156, \*158, 163, 166-67  
 Central America, 7-28  
 Colombia, 7-108, \*110  
 Costa Rica, 7-41  
 El Salvador, 7-35  
 legend of discovery, 3-245  
 street vendor, Syria, 3-295  
 Tanganyika, 5-158  
**Coimbra**, Portugal, university, 1-358, \*359  
**Coleman House**, Nantucket Island, Massachusetts, 6-159  
**Collective farming**, Armenia, 3-187  
 Russia, 3-132, 140, 147  
**Colleges and universities**  
 Athens, Greece, 3-31  
 Canada, 6-48, 108, 121-22, 124, 127, 129-30, \*132, 134, 142  
 Chile, 7-140, 143  
 Coimbra, Portugal, 1-358, \*359  
 Egypt, 5-91, \*100  
 England, 1-41, \*53  
 Finland, 2-58, \*61  
 Germany, 2-150  
 Greece, 3-38-39  
 Athens, 3-35  
 India, 4-67  
 Indonesia, 5-232  
 Ireland, 1-153, \*154  
 Istanbul University, 3-265  
 Lebanon, 3-315  
 Liberia, 5-139  
 Mohammedan, at Cairo, 5-113, 120, 126  
 Nigeria, 5-143  
 Peking, China, 4-330  
 Philippine Islands, 5-315  
 Scotland, 1-108, \*110, 121  
 South Africa, 5-202  
 Sudan, 5-129  
 Uganda, 5-158  
 United States, California, 6-293  
 Middle West, 6-261  
 North Carolina, 6-246  
 North Central States, 6-355, \*358  
 Northeastern States, 6-217, \*221, 224, \*331, \*333, \*335  
 Virginia, 6-246  
 Wales, 1-96  
**Collinstown Airport**, Ireland, 1-141  
**Cologne**, Germany, 2-121  
**Colombia**, republic of South America, 7-105-09  
 facts and figures, 7-115  
**Colombo**, capital, Ceylon, 4-165, \*167, \*169, \*177  
**Colonia**, city, Uruguay, 7-189  
**Colonna, Palazzo**, Rome, garden, 2-343  
**Colorado**, state, 6-273-94, \*\*298, \*\*299  
 cities, 6-363-64, \*365  
 national parks, 6-388  
**Colorado Plateau**, United States, 6-272, 276  
**Colorado River**, 6-273, \*\*299; 7-320, \*323  
 Grand Canyon of, 6-381, 383, \*\*395  
 Hoover Dam, 6-288  
**Colosseum**, Rome, 2-337  
**Colossi of Memnon**, Egypt, 5-76, \*\*77  
**Columbia Ice Field**, Jasper National Park, Canada, 6-402  
**Columbia River**, North America, 6-198, 273  
 falls, 7-348  
 highway along, 6-3302  
 salmon fishing, 6-301  
**Columbite** (mineral), Nigeria, 5-147  
**Columbus, Bartholomew**, founded Santo Domingo, 7-92  
**Columbus, Christopher**, burial place, 7-57, 92  
 discovered Haiti, 7-85  
 flagship, 7-271  
 statue in Barcelona, 1-336  
 supposed birthplace, Genoa, Italy, 2-322  
 voyages of, 1-312, 313  
**Columbus**, capital of Ohio, 6-354  
**Commerce**, *see* Trade  
**Commonwealth of Nations**  
 Aden, 3-381, 383  
 Australia, 5-322-47  
 Borneo, 5-257-70  
 British East Africa, 5-150-63  
 British Guiana, 7-94, 95-96, 104  
 British Honduras, 7-32-33  
 British West Africa, 5-141-50  
 Central African Federation, 5-163-71  
 Ceylon, 4-165-34  
 China, 4-276, 288  
 India, Republic, 4-19-69  
 islands of North Atlantic, 1-167, \*168-69, 170, 173, \*176  
 islands of Pacific, 5-284-85, \*287, \*288, \*\*298, 301, \*\*302, \*\*303  
 islands of South Atlantic, 1-165, \*166, \*174, 175  
 Malaya, 4-185-96  
 Malta, 1-3374, \*\*375, 376, 378, \*378, 383  
 New Zealand, 5-358-74  
 Pakistan, 4-70-100  
 Uganda, Africa, 7-296  
 Union of South Africa, 5-189-210  
 West Indies, 7-61, \*\*62, \*64, \*70, \*71, 72-78, \*78, 83  
*See also* Canada  
**Communications**, *see* Air service; Postal service; Railroads; Roads; Ships and shipping; Transportation  
**Communism**  
 in Albania, 3-56  
 in China, 4-265, 269, 272, 317, 324, 327, 329, 332  
 in Czechoslovakia, 2-194  
 in Germany, 2-139-43, 146-47, 152  
 in Hungary, 2-238  
 in Indochina, 4-213, 265  
 in Korea, 4-383  
 in Manchuria, 4-286  
 in Mongolia, 4-315  
 in Poland, 2-163-64  
 in Russia, 3-129, 137, 139-40, 147, 152  
 in Tibet, 4-119  
 in Yugoslavia, 3-80  
**Como, Lake**, Italy, 2-296, \*299  
**Comoro Islands**, off Africa, 5-223  
**Compiègne**, town of France, 1-304  
**Concepcion**, city, Chile, 7-140, 143, 145  
**Conciergerie**, Paris, prison of Marie Antoinette, 1-300  
**Concord**, Massachusetts  
 Old Manse, 6-206  
**Concord**, New Hampshire, 6-325  
**Conestoga (Pennsylvania) wagon**, 6-162-63, \*178  
**Confucianism**, religion in China, 4-257  
**Confucius**, founder of Chinese religion, 4-257, 322  
*See also* Confucianism  
**Congo, Belgian**, 1-225; 5-173, \*173, \*175, \*176, 181, 182, \*184, 185, \*186; 7-2288  
 facts and figures, 5-188  
**Congo, French (French Equatorial Africa)**, 5-19, 22, 25, 173, 187  
**Congo River**, Africa, 5-173, 180, 182, \*186  
**Congress Party**, India, 4-71, 73  
**Connaught Place**, New Delhi, 4-36  
**Connecticut**, state, 6-205, \*207  
 cities, 6-326, \*331  
 facts and figures, 6-224  
**Connecticut River**, 6-324, \*331  
**Connemara**, Ireland, 1-145

# ALPHABETICAL INDEX

- Constantine**, city of Algeria, 5-34, 48, \*\*51;  
7-327
- Constantinople (Istanbul)**  
capital of Ottoman Empire, 3-248-49  
Venice loses, 2-357  
wars with Bulgaria, 3-83  
*See also* Istanbul
- Constantza**, port city of Rumania, 3-109
- Continental Divide**, United States, 6-276
- Conway Castle**, Wales, 1-86, \*88-89
- Cook, Captain James**, 5-359  
in Antarctica, 3-223  
on North American coast, 6-114
- Cook, Mount**, New Zealand, 5-358
- Cook Islands**  
facts and figures, 5-301
- Cooking**  
Argentina Indians, 7-212  
France, 1-238  
Italy, 2-324, 326, 328  
Pacific, 5-289  
*See also* Food
- Co-operative societies**  
Denmark, 2-103-06, \*107  
Norway, 2-10  
wheat pool, Canada, 6-105
- Copan**, Honduras, Maya ruin, 7-226
- Copenhagen**, capital of Denmark, 2-90, 94-95,  
\*95, 97, \*97, \*98
- Copernicus, Nicolaus**, statue in Warsaw, Po-  
land, 2-170
- Copper**  
Belgian Congo, 5-185  
Canada  
Manitoba, 6-112  
Chile, 7-145  
Northern Rhodesia, 5-163, \*171  
Peru, 7-121, \*124  
Turkey, 3-282  
Uganda, 5-155  
United States, 6-292, \*300, 363
- Copra**, dried coconut meat, 5-290-91, 300
- Coquimbo Province**, Chile, 7-136
- Coracles**, boats, 7-267
- Coral**  
formation, 5-277  
Great Barrier Reef, 5-326  
reefs, 5-277
- Corazzieri**, Italian honor guard, 2-346
- Cordillera**, mountains, North and South Amer-  
ica, 6-112, 148; 7-108
- Cordillera de la Costa**, Chile, 7-137
- Cordillera de Mérida**, mountain, Venezuela,  
7-99
- Cordoba**, city, Argentina, 7-214, 218
- Cordova**, city of Spain, 1-309, 312, \*\*314
- Corfu**, island in Mediterranean, 1-3370, 378,  
380, 383  
facts and figures, 1-383
- Corinth**, Greece, ruins of ancient city, 3-16,  
\*\*17
- Corinto**, Nicaraguan port, 7-37
- Cork**, city, Ireland, 1-140
- Cork, County**, Ireland, 1-1135, \*140
- Cork**, harvest in Portugal, 1-347
- Cormac MacArt**, Irish king, 1-128
- Corn Belt**, United States, 6-249-50, 252, \*260
- Corn Palace**, Mitchell, South Dakota, 6-269
- Corner Brook**, Newfoundland, 6-57
- Cornwall**, English district, 1-44, \*\*55
- Cornwallis, Edward**, founder of Halifax, Nova  
Scotia, statue, 6-123
- Coronet Peak**, New Zealand, 5-368
- Corregidor Island**, Philippines, 5-318
- Corrientes**, Argentine province, 7-214
- Corroborees**, festivals of Australian aborigines,  
5-352, 356
- Corsica**, island in Mediterranean, 1-369, 372,  
\*372, \*373  
facts and figures, 1-383
- Cortes, Hernando**, Spanish conquistador, 7-9
- Cossacks**, people in Russia, 3-129
- Costa Rica**, republic of Central America, 7-37,  
40-41, \*40  
facts and figures, 7-42
- Costumes**, Afghanistan, 4-8, \*8, \*10, \*11  
Africa, 5-220, \*\*160  
*See also* countries of Africa  
Albania, 3-45-46, \*46, \*50, 51, \*55  
Algeria, 5-41, \*\*43  
Alsace, 7-2291
- Costumes (continued):**  
American Indians, 6-7, \*15, \*\*18, \*\*22, \*\*23,  
\*\*27, \*28, 29, \*\*30, \*\*274, \*\*275, \*\*278,  
\*\*279; 7-11, \*114, \*266  
Andes Mountains, 7-130  
Angola, 5-174  
Annam, 4-214, 220  
Antarctica, 7-224, \*229, \*233  
Arab, 3-329, \*\*341, \*350, \*373  
Arabia, 3-354, \*364, 373  
Argentina, 7-206, \*\*213  
Ashanti, 5-160  
Australian aborigine, 5-352, \*352, \*353, \*354,  
355, \*355  
Austria, 2-220  
Austrian Tyrol, 2-225  
Bagdad, 3-243, \*244, 245, \*246  
Bali, 5-244  
Baltic States, 2-184  
Bavaria, 2-126, \*133  
Bedouins, 3-347, 351, \*\*352, \*\*353, \*\*357  
Bhutan, 4-132, \*\*133, \*\*136  
Bolivia, 7-116, \*\*127, 128  
Borneo, 5-258, \*\*259, \*\*262, \*\*263  
Brazil, 7-153  
Brittany, 1-233, \*268, \*273, 281  
Bulgaria, 3-84, \*\*91, \*92, \*\*94, \*\*95  
Burma, 4-151, \*153, \*155, 156, \*158, 164  
Cambodia, 4-215  
Canada, 6-7  
Canary Islands, 1-171  
Ceylon, 4-171, \*\*174, \*\*175, \*\*184  
Chile, 7-137, \*137, \*290  
China, 4-255, \*\*262, \*\*263, \*\*270, \*\*271,  
286, \*293, 329  
Colombia, 7-107  
Czechoslovakia, 2-192, \*\*193, \*\*196, \*\*197,  
\*200, \*204, \*205, 208, \*210, \*212  
Denmark, 2-92, \*\*93, 96, \*103  
East Indies, 5-234, \*\*238, \*\*239, \*\*242,  
\*246, \*247, \*250, \*251, \*\*254, \*255  
Egypt, 5-72, 75, 97, \*111  
England, survivals of the past, 1-118, \*28,  
\*29  
judges, 1-25  
Eskimos, 2-70, 80; 6-15, 29  
Estonia, 2-180, \*\*185; 7-285  
Faroe Islands, 2-96  
Finland, 2-48, \*54, \*55, 60  
Formosa, 4-241, 245  
French Somaliland, 5-26  
Gambia, 5-153  
Georgian Republic, 3-191, \*192  
Germany, 2-125, \*\*127, \*\*135; 7-234  
Greece, 3-4, \*10, \*15, \*19, \*\*20, \*\*24, \*\*25,  
27  
Greenland, 2-80, \*\*88, \*\*89  
Guatemala, 7-29, 32  
Guianas, 7-95  
Hawaii, 6-312  
Hungary, 2-238, 241, \*241, \*242, \*243, \*\*250,  
\*\*251  
Iceland, 2-79  
India, 4-224, 25, \*\*26, \*\*27, \*\*41, \*\*56, \*58,  
\*62, \*\*102, \*\*103, \*106  
Indonesia, 5-227, 236, \*\*243  
Inner Mongolia, 4-304, \*313  
Iran, 3-211  
Iraq, 3-222, \*233, 236, \*238  
Ireland, 1-128, \*\*139, \*151, \*152, \*156  
Israel, 3-336, \*\*337  
Italy, 2-306, \*\*307  
Japan, 4-335, \*337, \*\*338, \*\*339, \*341,  
\*346, \*347, \*350, \*\*351, \*\*354, \*\*355,  
\*361, \*362, \*370  
Java, 5-236  
Jordan, 3-345  
Kazakhstan, 4-309  
Kashmir, 4-102, \*\*103, \*108, 111  
Kenya Colony, 5-156  
Korea, 4-376, \*377, 380  
lama, 4-127  
Latvia, 2-175, \*\*188, \*\*189  
Lebanon, 3-306, \*307, \*313, \*314, \*316  
Liberia, 5-139  
Libya, 5-35  
Liechtenstein, 2-289  
Madagascar, 5-216  
Madeira Islands, 1-161  
Malaya, 4-187, \*189, \*191  
Manchuria, 4-285, \*285

# ALPHABETICAL INDEX

## Costumes (continued):

Maori, New Zealand, 5-\*376, \*378, \*381, \*382  
 Martinique, 7-\*76  
 Mexico, 7-\*4, \*\*23  
 Middle East, 7-\*290  
 Mongolia, 4-\*314, 315  
 Morocco, 5-\*4, \*\*9, \*11, \*\*12, \*\*13  
 Nepal, 4-\*143, \*146  
 Netherlands, 1-\*190, \*\*196  
 New Guinea, 5-\*272  
 Nigeria, 5-\*146, \*\*157  
 Norway, 2-\*12, \*\*13, 15  
 Pacific islands, 5-\*282, \*283, \*\*298, \*\*302  
 Pakistan, 4-\*72, \*79, \*81, \*83, \*86, \*\*90, \*\*94  
 Paraguay, 7-\*170  
 Pathan, 4-\*98  
 Peru, 7-118, 121  
 Philippines, 5-\*304, \*\*310, \*\*311, 317-18  
 Poland, 2-\*154, \*159, \*162, 164  
 Portugal, 1-\*356, 359, \*360, \*361, 364, \*365, \*\*367, 368  
 Ruanda Urundi, 5-\*179  
 Rumania, 3-\*111, \*116, 117, \*118, \*120, \*\*123, \*126, \*\*127  
 Russia, 3-\*131, \*141; 7-\*354  
 Samoa, 7-\*295  
 San Marino, 2-288  
 Scotland, 1-\*101  
 Scotland, bagpiper, 1-109  
 Senegal, 5-\*31  
 Siberia, 3-\*150, \*151  
 Sinkiang (Sin-Kiang), 4-\*290, \*294, 298  
 Slovakia, 2-\*197, \*\*200, \*210  
 South Africa, 5-201  
 Spain, 1-\*323, 325, \*\*326, \*\*327, \*328, \*\*330, \*\*331, \*332, \*334, \*\*335  
     gipsies, 7-\*298, \*\*299  
 Sudan, 5-\*129, \*130  
 Sumatra, 5-\*241  
 Surinam, 7-\*97  
 Sweden, 2-\*33, \*\*37, \*\*40, \*\*41, \*\*45  
 Swiss Guards, at Vatican, 2-\*344  
 Switzerland, 2-\*258, \*\*259, \*261, \*265  
 Syria, 3-\*292, \*300, \*302  
 Thailand, 4-\*206, \*\*207, \*219  
 Tibet, 4-\*118, \*\*121, \*126  
 Transylvania, Rumania, 3-\*110  
 Tunis, 5-\*55  
 Turkestan, 3-166, \*167, \*\*168, 169, \*170, \*171, \*174, \*179  
 Turkey, 3-\*249, 256, 259  
 Tyrol, 2-\*223  
 Uganda, 5-\*167  
 Uruguay, 7-\*192  
 Wales, 1-\*87; 7-\*294  
 West Indies, 7-71  
 Yugoslavia, 3-57, 68, \*68, 69, \*\*70, \*\*71, \*72  
 Zanzibar, 5-\*164, \*\*165  
*See also* Headdress  
 Côte d'Azur, south coast of France, 1-249, 256  
*See also* Riviera, French  
 Cote d'Or, region of France, 1-\*245  
 Cotopaxi, Ecuador, volcano, 7-109  
 Cotswolds, English district, 1-44  
 Cotton, Australia, 5-\*331  
     Bolivia, 7-\*118  
     India, 4-\*37, 54  
     labor unions, India, 4-82, 84  
     mill at Szeged, Hungary, 2-\*244  
     Nigeria, Africa, 5-\*145  
     Pakistan, 4-77, 79-80  
     picker in Belgian Congo, 5-\*173  
     picker in Rumania, 3-\*113  
     picker in Uzbek, 3-\*166  
     spinning, Bagdad, 3-\*239  
     Sudan, 5-128  
     United States  
         Southern States, 6-236, 242  
         West Indies, 7-74  
 Cotton Bowl, Dallas, Texas, 6-\*319  
 Covent Garden, London, market for fruit, vegetables and flowers, 1-\*72, \*73, 84  
 Cowboys  
     Paraguay, 7-\*175  
     Uruguay, 7-\*192  
 Cowes, English yachting center, 1-38  
 Craft, *see* Boats  
 Crafts, Angola, Africa, 5-\*183, \*185  
     Bahrein Islands, 3-\*377  
     Belgium, 1-\*214  
     Burma, 4-\*152

## Crafts (continued):

China, 4-\*263, \*276  
 Cyprus, 1-\*381  
 Czechoslovakia, 2-\*195, \*199  
 Denmark, 2-\*106  
 Dominican Republic, 7-\*90  
 Egypt, 5-100  
 Finland, 2-\*53  
 France, 1-\*232, \*233, \*272  
 Germany, 2-\*129  
 Hungary, 2-\*247  
 India, 4-\*62  
 Iran, 3-\*210, \*214  
 Ireland, 1-151  
 Italy, 2-305, \*323  
 Java, 5-\*227  
 Latvia, 2-\*189  
 Maori, New Zealand, 5-\*377, \*384  
 New Guinea, 5-274  
 Pacific, 5-283, 290-91, 295-96, \*\*299, \*300, \*\*303  
 Pakistan, 4-\*99  
 Paraguay, 7-\*170, \*178  
 Philippines, 5-\*321  
 Quebec, 6-\*76, 77  
 Rumania, 3-\*117  
 Siberia, 3-\*151  
 spinning and weaving, 7-353-67  
 Sumatra, 5-\*233  
 Sweden, 2-\*27, \*28, \*31  
 Switzerland, 2-\*267  
*See also* Industries  
 Crater Lake, Oregon, 6-388, \*\*391  
 Crathie Church, Scotland, 1-\*19  
 Cree Indians, 6-\*24  
 Crete, Island of, 1-\*379, 380, 381  
     excavations, 7-257  
     facts and figures, 1-383  
 Crimea, Russia, 3-\*128, 129  
 Criollos, people of inland Argentina, 7-200  
 Croagh Patrick, mountain, Ireland, 1-155  
 Croatia, part of Yugoslavia, 3-57, 69, \*\*70, \*73, 74, \*75, 79  
     map, 3-\*60  
     facts and figures, 3-80  
 Cross Lake, Ontario, mineral deposits, 6-\*82  
 Crusaders, in Syria, 3-289  
 Crystal Cave, Bermuda Islands, 1-\*168  
 Ctesiphon, Arch of, Persian ruin, 3-\*227  
 Cuba, 7-43-60  
     facts and figures, 7-60  
 Cuicul, ruins of Roman town, Algeria, 5-\*44  
 Culcross, village in Scotland, 1-\*113  
 Cultural activities, Belgium, 1-227  
     Ireland, 1-133, 144, 147-48, 150-51, 153  
     Italy, 2-312, \*313, 316  
     Mexico, 7-16  
     North American Indians, 6-\*20, \*21  
     Pacific, 5-234-85, 292, 296  
     Pakistan, 4-84, 92  
     Philippines, 5-316, 319  
     South Africa, 5-\*194, \*201  
     United States, 6-\*251  
 Cumaná, Venezuela, oldest Spanish settlement, 7-99  
 Cunard, Samuel, shipowner, 7-272, 275  
 Cuneiform writing, 3-221  
 Curaçao. For Facts and Figures, *see* Statistical Summary, 7-83  
 Customs  
     Afghanistan, 4-8  
     Africa, 5-206  
     Albania, 3-53, 54  
     Andorra, 2-291  
     Annam, 4-220, 223  
     Arabia, 3-373  
     Arabs on march, 3-380  
     Armenia, 3-187  
     Australian aborigine, 5-\*352, 354-56  
     Bedouins, 3-301, \*\*349, \*\*353, 356  
     Belgian Congo, 5-\*180, 182, 183  
     Belgium, 1-227-28  
     Brazil, 7-152  
     Bulgaria, 3-\*94  
     Burma, 4-155, 156, 157, 164  
     Canary Islands, 1-164  
     Central America, 7-\*31, 32, 37  
     China, 4-\*256, 257, 265, \*\*271, 327, 329, 332  
     Dahomey, 5-29  
     Egypt, 5-75, 78, 96, 98, \*\*109, \*129  
     Finland, 2-57, 58, 60



# ALPHABETICAL INDEX

## Customs (continued):

Formosa, 4-235, 243  
 France, 1-248-49, \*259, \*260, 270  
 Greece, 3-8, 14, 19  
 Hungary, 2-238  
 Iceland, 2-79  
 India, 4-40, 47, 50, 62, 66  
 Indochina, 4-221  
 Iran, 3-203, \*211, 213  
 Iraq, 3-234, \*246  
 Ireland, 1-128-29, 133, 137, 148  
 Italy, 2-312, 316, 320, 322, 328, \*334  
 ancient Rome, 7-286  
 medieval Venice, 2-355, 360  
 Japan, 4-\*\*339, \*345, \*\*347, 349, \*\*350, \*\*351, 352, \*\*354, \*\*355, 365, 367, 369  
 Java, 5-236  
 Kirghiz people, 3-178  
 Korea, 4-376, \*379  
 Lebanon, 3-313  
 Luristan, Iran, 3-202  
 Malaya, 4-189, \*191  
 Manchuria, 4-285  
 Maori, New Zealand, 5-376, \*378, \*381  
 Mexico, 7-6  
 Mongolia, 4-307, 316  
 Morocco, 5-13  
 Nepal, 4-143  
 New Guinea, 5-272  
 Norway, 2-15, 23  
 Pacific, 5-282, 284-86, 275, 292, \*\*299  
 Pakistan, 4-\*\*91  
 Paraguay, 7-174  
 Philippines, 5-309, 312, 314, 316-18, 320-21  
 Poland, 2-164  
 Rumania, 3-117, 119  
 Russia, 3-145  
 Senegal, 5-31  
 Siam, 4-206, 212  
 Sicily, 2-380  
 Sin-Kiang, 4-298  
 Spain, 1-325, \*\*327, \*328, 329, 339, 341, 343  
 Sweden, 2-30, 32, 35, 43  
 Switzerland, 2-265, \*272, 276  
 Syria, 3-304  
 Tibet, 4-\*\*121, \*\*124, \*126  
 Turkey, 3-251, \*251, 253, 259, \*\*276  
 Uganda, 5-167  
 United States  
 backwoods humor, 6-169  
 frontier boatmen, 6-180  
 Puritans, 6-159, 162  
 Uruguay, 7-190, \*192, 193  
 Venice, 2-362  
 Wales, 1-88-90  
 Yugoslavia, 3-60, \*68  
 See also Betrothal, Burial and Wedding customs  
 Cuzco, ancient capital of Perú, 7-117, 119, \*\*122  
 Cypress Hills Provincial Park, Saskatchewan, 6-428  
 Cyprus, island in Mediterranean, 1-380, 381, \*381, 383  
 facts and figures, 1-383  
 Cyrenaica, see Libya  
 Cyrus the Great, Persian ruler, 3-199  
 Czechoslovakia, 2-191-216  
 areas annexed by Germany, 2-109  
 map, 2-194  
 facts and figures, 2-216  
 D  
 Dacca, capital, East Pakistan, 4-96  
 Dahabeahs, Nile River houseboats, 5-102; 7-277  
 Dahomey, French territory in Africa, 5-19, 29, \*29, 32  
 facts and figures, 5-32  
 Dairen, port in Manchuria, 4-284  
 Dairying  
 Denmark, 2-99, 103-05, \*105, \*107  
 Ireland, 1-127  
 New Zealand, 5-365, 367  
 Norway, 2-10  
 Switzerland, 2-263  
 Turkey, 3-252  
 United States, 6-217  
 Dak runners, Nepal, 4-147  
 Dakar, port, French West Africa, 5-28, \*31  
 Dakota Indians, see Sioux Indians

Dal Lake, Kashmir, 4-111, 113, \*117  
 Dalada Maligawa, temple, Ceylon, 4-172, \*173  
 Dalai Lama, ruler of Tibet, 4-119, 120, 122, 137  
 Dalecarlia, region of Sweden, 2-28, 32, \*\*41  
 Dallas, city of Texas, 6-319, 349  
 Dalmatia, part of Yugoslavia, 3-57, 60, \*64, 77, 79  
 map, 3-60  
 Damascus, capital of Syria, 3-286, \*296, \*297, \*298, \*299, 301, 303  
 Dams  
 France, 1-262, 264  
 India, 4-29  
 Madagascar, 5-216  
 Owen Falls Dam, Uganda, 5-166  
 Sind Barrage, Pakistan, 4-85  
 See also names of dams  
 Dancing  
 Africa, 5-154, \*188  
 Australian aborigines, 5-356  
 Bali, 5-244, 245, \*\*251  
 Bolivia, 7-116  
 Bulgaria, 3-92  
 Burma, 4-155  
 devil dancers, 4-121, \*\*182  
 French Guiana, 7-98  
 Georgian Republic, 3-197  
 gipsies, 7-298, \*\*299, \*\*303  
 Greece, 3-14  
 Haiti, 7-84, 89  
 Hungary, 2-238  
 India, 4-441  
 Malaya, 4-191  
 Pacific islands, 5-298  
 Pakistan, 4-72, \*\*94  
 Philippines, 5-319  
 Poland, 2-154  
 rain dance, Zuni Indians, 6-283  
 Ruanda Urundi, 5-179  
 Rumania, 3-117, \*\*127  
 Scotland, sword dances, 1-101  
 Tibet, 4-121  
 Danes  
 in Germany, 2-137  
 Dante Alighieri, Italian poet, 2-295  
 Danube River, 2-202, 228, \*\*230, \*236, 237, \*248; 3-109-10, \*122  
 Danube Valley, near Vienna, 2-229  
 Danzig (Gdansk), port, Poland, 2-171  
 Dar es Salaam, capital, Tanganyika, 5-158, \*162  
 Darius I, king of Persia, capital at Persepolis, 3-206  
 palace at Susa, 7-256  
 Dartmoor, English district, 1-44  
 Dartmouth College, New Hampshire, 6-217  
 Darwin, Charles, 5-277  
 Darwin, town of Australia, 5-340, \*342  
 Dashnaks, political party in Armenia, 3-184-85  
 Dates, Africa, 5-24, \*43, \*\*50  
 Iraq, 3-223  
 Daulatabad Fortress, India, 4-221  
 Daware, village, Kashmir, 4-104  
 Dawson City, city, Yukon Territory, 6-146  
 Dayaks (Dyaks), tribes of Borneo, 5-257, 260, \*\*262, \*263, 264, 270  
 Dayton, city of Ohio, 6-350  
 Dead Sea, 3-339  
 Dearborn, city of Michigan, 6-353  
 Deir-el-Bahri, Egypt, temple, 5-58  
 Delamere, Lord, statue, Nairobi, Kenya, 5-155  
 Delaware, state, 6-207, 221  
 cities, 6-236  
 facts and figures, 6-224  
 Delaware River, 6-221  
 Delaware Water Gap, between New Jersey and Pennsylvania, 6-218  
 De León, Ponce, Spanish explorer, 7-79  
 Delhi, Old, city of India  
 Jama Masjid Mosque, 4-68  
 palace, 4-30  
 Pearl Mosque, 4-26  
 Dells of the Wisconsin, 6-256  
 Delphi, ancient city of Greece, ruins of Shrine, 3-38  
 Demavend Mountain, Persia, 3-200  
 Dendera, Egypt, temples, 5-65  
 temple to Hathor, 5-68  
 Déné Indians, see Athapascans

# ALPHABETICAL INDEX

- Denmark**, 2-90-108  
colonies, 2-67-89; 7-75  
Iceland's connection with, 2-67, 87  
map, 2-94  
facts and figures, 2-108
- Denver**, capital of Colorado, 6-363, 364, \*365
- Derby day**, Epsom Downs, England, 1-61
- Dermot MacMurrough**, Irish king, 1-136
- Derry**, town, Ireland, *see* Londonderry
- Derry, County**, Ireland, 1-155
- Dervishes**, Mohammedan sect, 5-161
- Derwentwater**, England, 1-63
- Des Moines**, capital of Iowa, 6-353, 357, 362
- Des Moines Rapids**, Iowa, 6-252
- Desert, Mount**, Acadia Park, Maine, 6-380
- Deserts**, 7-331-42  
Afghanistan, 4-4  
Arabia, 3-362, \*382  
Bedouins, 3-347-60  
Chile, 7-133, \*134  
Chinese Turkestan, 4-289, 294, 302  
Gobi, 4-5, 303, 305, 307  
Kalahari, South Africa, 5-195, 201  
oases, 5-24, \*36, \*\*47, 48  
Pakistan, 4-77; 7-314  
Russian Turkestan, 3-172, \*180  
Sahara, 5-20, \*\*21  
Sudan, 5-127  
*See also* names of deserts; as Gobi; Sahara
- Detroit**, city of Michigan, 6-320, 353, \*354
- Deucalion and Pyrrha**, legend of, 3-5
- De Valera, Eamon**, Irish patriot, 1-144
- Devil-dancers**, 4-121, 166, \*\*182
- Devil's Peak**, mountain of South Africa, 5-202
- Devils Tower**, Wyoming, 6-389
- Devonshire**, England, 1-32, 41, 43, \*\*59
- Dharm Rájá**, ruler in Bhutan, 4-136
- Dhow**, Middle Eastern boat, 3-372
- Diamond Head**, Hawaiian crater, 6-307, \*309
- Diamond-cutting**  
Belgium, 1-225  
Netherlands, 1-194
- Diamonds**  
Belgian Congo, 5-182  
Brazil, 7-151  
British Guiana, 7-96  
mining in Africa, 5-195, \*203  
Sierra Leone, 5-150  
South Africa, 5-195  
Tanganyika, 5-158
- Diaz, General Porfirio**, Mexican dictator, 7-12
- Diego-Suarez**, port of Madagascar, 5-219
- Dieppe**, town, France, 1-276
- Dikes**  
Netherlands, 1-180-81, \*184, \*185
- Dinan**, town, France, 1-282, \*284
- Dinosaur Park**, Alberta, Canada, 6-135
- Dionysiac**, theater at Athens, 3-41, 44
- Divedro River**, Switzerland, 7-318
- Djukas**, Negroes of Surinam, 7-97
- Dnepropetrovsk**, city in Russia, 3-137
- Doge**, Venetian ruler, 2-360  
palaces, 2-362, 366
- Dogs**, Alaska, 7-313  
Arctic travel, 7-308, 310  
as draft animals for Eskimos, 2-74  
Manchuria, 4-283  
Switzerland, 2-260
- Doldrums**, tropic calm, 5-281
- Dolmens**, groups of ceremonial stones, 7-261, \*\*263
- Dolomites**, arm of Alps  
in Italy, 2-308
- Dome of the Rock**, Jerusalem, 3-334
- Dominica**, island of West Indies, 7-75
- Dominican Republic**, 7-85, 89-93  
For Facts and Figures, *see* Statistical Summary, 7-93
- Donegal County**, Ireland, 1-138, 155
- Donegal Quay**, Belfast, 1-154
- Donkeys**  
Albania, 3-50  
Ireland, 1-152  
Libya, 5-35  
Poland, 2-158  
Portugal, 1-354  
Sahara, 5-24  
Syria, 3-294  
Tibet, 4-144  
West Indies, 7-85
- Donner party**, U. S. pioneers, 6-177
- Doon Cliffs**, Ireland, 1-142
- Dorchester**, town of England, 1-40
- Dordogne Department**, France  
cave paintings, 1-230
- Dordogne River**, France, 1-242
- Douro River**, Portugal, 1-346, \*352, \*\*363
- Dover**, capital of Delaware, 6-207, 336
- Dover**, port of England, 1-33
- Downing Street**, London, 1-84
- Downs**, South, English district, 1-34, \*34, 37
- Drac River**, France, gorge of, 7-324
- Drake, Sir Francis**, in West Indies, 7-61
- Drakensberg Mountains**, South Africa, 5-205
- Dravidians**, people of India, 4-25, 28
- Dresden**, city of Germany, 2-141
- Drogheda**, town, Ireland, 1-130
- Druids**, Brittany, 1-269-70  
Ireland, 1-128  
Wales, 1-87
- Drum Tower**, Peking, China, 4-321
- Druses**, Mohammedan sect, 3-297, 312-13, \*314
- Dublin**, capital, Irish Republic, 1-128, \*132, \*133, \*136-37, \*141, 151
- Dubrovnik (Ragusa)**, Yugoslavia, 3-64
- Dufferin Terrace**, Quebec City, 6-73, \*126
- Dugout canoes**, primitive boats, 7-265
- Duluth**, Minnesota, 6-257, 357
- Duma**, Russian parliament, 3-133
- Dumbarton Oaks conference**, 7-237
- Dundee**, city, Scotland, 1-117
- Dunluce Castle**, Ireland, 1-134
- Durazzo**, port of Albania, shipping at, 3-54
- Durban**, city of South Africa, 5-200, \*202
- Dürer, Albrecht**, birthplace of, 2-132
- Durgapuja**, harvest festival, India, 4-40
- Durham**, town of England, 1-46
- Dussera**, harvest festival, India, 4-40
- Dutch**, people of Netherlands, *see* Netherlands
- Dutch East India Company**, boats, 7-272
- Dutch East Indies**, *see* East Indies
- Dutch Guiana**, 7-95, 96, \*96, 104  
facts and figures, 7-104
- Dutch West Indies**, *see* Netherlands—overseas territories
- Dyaks**, *see* Dayaks
- Dykes**, *see* Dikes
- Dzong**, mountain fortress, Bhutan, 4-140

## E

- Eagles**, trained for hunting, China, 4-295
- Earthquakes**, Central America, 7-27, 29, 37  
Japan, 4-371  
Perú, 7-119  
relation to volcanic action, 7-385  
West Indies, 7-78
- East African Federation**, 5-140
- East Bengal**, Pakistan, 4-73
- East Indies**, 5-224-56  
map, 5-224  
*See also* Malay Archipelago
- East Pakistan**, *see* Bengal
- Easter Island**, Chile, 7-146, \*264
- Easter rebellion**, 1916, Ireland, 1-140
- Eastern Townships**, Quebec, 6-68, \*128
- Echmiadzin**, monastery in Armenia, 3-189, \*191
- Echo Lake**, New Hampshire, White Horse  
Ledge, 6-219
- Economic and Social Council**, of the United Nations, 7-237-38
- Ecuador**, 7-105, 109-15  
facts and figures, 7-115
- Edam**, town, Netherlands, 1-191
- Edinburgh, Duke of**, 6-37
- Edinburgh**, capital, Scotland, 1-100-01, \*\*103, 117, 120-21  
Castle, 1-107, 120  
Princes Street, 1-105  
Tolbooth, medieval prison, 1-102  
University, 1-121
- Edmonton**, city, Alberta, 6-134-35, \*139
- Education**  
Afghanistan, 4-15, 18  
Albania, 3-54, 56  
Algeria, 5-41  
American Indians, 6-24  
Armenia, 3-189  
Australia, 5-340, 342  
Bagdad, 3-241, 243  
Baltic States, 2-184

# ALPHABETICAL INDEX

- Education (continued):**  
 Belgian Congo, 5-176  
 Belgium, 1-227  
 Bulgaria, 3-86, \*96, 97  
 Burma, 4-152  
 Canada, 6-34, \*93  
   Atlantic Provinces, 6-48  
   Prairie Provinces, 6-108  
   Quebec, 6-33, 69, 124  
 Central America, 7-29  
 Chile, 7-143  
 China, 4-272  
 Denmark, 2-105-06  
 Ecuador, 7-111  
 Egypt, 5-91, 98, \*100, \*\*113, 120, 126  
 Eskimos, 6-14  
 Estonia, 2-\*179  
 Finland, 2-58, \*61  
 France, 1-240  
 French West Africa, 5-\*30  
 Germany, 2-139, 143, 150  
 Greece, 3-38-39  
 Greenland, 2-\*73  
 Hawaii, 6-312, \*312, 314  
 Iceland, 2-69  
 India, 4-\*63, 66-67  
 Indochina, 4-\*226  
 Indonesia, 5-\*232, 256  
 Iran, 3-213  
   of women, 3-216  
 Iraq, 7-253  
 Ireland, 1-133, 153, 155  
 Israel, 3-334  
 Italy, 2-350  
 Latvia, 2-174  
 Lebanon, 3-315, 317  
 Liberia, 5-139  
 Maoris, New Zealand, 5-380, \*384  
 Mexico, 7-15  
 Nepal, 4-\*142  
 Netherlands, 1-194-95  
 New Guinea, 5-\*273, \*274  
 New Zealand, 5-372  
 Norway, 2-23  
 Pakistan, 4-\*92, \*93  
 Philippines, 5-315, \*315  
 Rumania, 3-105  
 Russia, 3-\*175, \*188  
 Scotland, 1-100-01  
 South Africa, 5-\*202  
 Sudan, 5-129  
 Syria, 3-304  
 Thailand, 4-212  
 Turkestan, 3-\*176, 177  
 Turkey, 3-253, 256  
 United States, 6-\*268  
   Middle West, 6-261, 264  
   North Central States, 6-\*355, \*358  
   Northeastern States, 6-\*331, \*333, \*335  
   Southern States, 6-243-44  
   Western States, 6-293  
 Uruguay, 7-188  
 Venezuela, 7-103  
*See also* Colleges and universities
- Edward II**, king of England, 1-86
- Egypt**  
 ancient canoes, 7-\*276  
 ancient glories, 5-57-78  
 ancient sculpture, 7-\*251  
 ancient trade with Syria, 3-287  
 Cairo, 5-105-26  
 map, 5-\*92  
 modern Egypt, 5-90-104  
 Nile River, floods, 7-317  
 sphinxes and pyramids, 5-79-90  
 facts and figures, 5-104
- Eiderdown**, exported from Iceland, 2-68
- Eiffel Tower**, Paris, 1-\*301
- Ein Karim**, Israel, 3-\*331
- Eire (Irish Free State)**, *see* Ireland
- Eisteddfod**, Welsh festival, 1-89-90, \*91
- El Azhar Mosque**, Cairo, Egypt, 5-\*113
- El Azhar University**, Egypt, 5-126
- El Kantara**, Algeria, oasis, 5-\*47
- El Mahatta Square**, Cairo, 5-\*106
- El Obeid**, city, Sudan, 5-129
- El Paso**, city of Texas, 6-349
- El Salvador**, republic of Central America, 7-  
 \*31, 33, \*33, 35, \*35  
 facts and figures, 7-42
- Elbe River**, 2-\*208
- Elbow River**, Alberta, 6-\*140
- Elburz Mountains**, Persia, 3-200
- Electric power**, *see* Water power
- Elephants**, 7-368-83  
 Burma, 4-150-51, \*156  
 Siam, 4-205, \*\*210  
 white, 4-198  
 stone carving of, Ceylon, 4-\*173
- Elizabeth II**, Queen of England, 6-\*37
- Elizabethan theater**, Norwich, England, 1-\*48
- Elizabethville**, town, Belgian Congo, 5-\*176
- Elk Island National Park**, Alberta, 6-\*418, 420, 422
- Elili Dere River**, Bulgaria, 3-\*102
- Elqui Valley**, Chile, 7-136
- Elsinore (Helsingor)**, town of Denmark, 2-97, \*99
- Embankment Gardens**, London, 1-\*68, \*\*79
- Emerald Lake**, British Columbia, 6-\*111
- Emerald Spring**, Yellowstone Park, 6-\*387
- Encarnacion**, city, Paraguay, 7-180
- Engineering**  
 Pacific islands, 5-295  
 Philippines, 5-313-14, \*319
- England**  
 Celts, metal-work of, 7-261, \*\*262  
 country and town life, 1-32-64  
 gipsies, 7-\*304  
 headdress, 7-289, 292  
 London, 1-65-84  
 map, 1-\*35  
 Stonehenge ruins, 7-\*260  
 survivals of ancient days, 1-20-31  
 Thames River, 7-320  
 facts and figures, 1-64  
*See also* Commonwealth of Nations; Great Britain
- English**  
 boat-building, 7-271  
 colonization of Canada, 6-33-34, 43  
*See also* England
- Entebbe**, city, Uganda, 5-158
- Entre Rios**, Argentine province, 7-214
- Epidaurus**, Greece  
 ancient amphitheater, 3-\*6
- Epiphany, Feast of**  
 celebration in Greece, 3-23, 26
- Epsom Downs**, England, 1-\*61
- Erebus, Mount**, volcano of Antarctica, 7-231
- Erechtheum**, ancient temple, Athens, 3-\*29, \*32, 33, 41
- Eric the Red**, Norwegian explorer, 2-67, 80
- Ericson, Leif**, statue of, in Reykjavik, 2-\*77
- Erie Canal**, United States, 6-179
- Erie, Lake**, 6-81; 7-343
- Eritrea**, Africa, 5-\*136, \*137, 140
- Erivan**, Armenia, *see* Yerevan
- Esbjerg**, city of Denmark, 2-99
- Escolta**, Manila street, 5-315, \*317
- Escondido River**, Nicaragua, 7-36
- Escorial**, Spanish monastery, museum and palace, 1-343
- Eskimos**  
 people of North America, 6-29  
 Alaska, 6-315-16  
 Baffin Island, 6-\*14  
 boats, 2-\*69; 7-269, \*278  
 Canada, 6-10-16, 149, 151  
 Baffin Island, 6-\*150  
 Labrador, 6-45  
 Greenland, 2-74, \*75, 80, \*\*81, \*\*88, \*\*89  
 houses, 2-\*73  
 seal-hunting, 2-80
- Essex**, village, 1-\*49
- Estonia (Esthonia)**, 2-173-90  
 Oesel Island, headdress, 7-\*285  
 facts and figures, 2-190
- Estoril**, resort of Portugal, 1-\*353
- Estremadura**, region, Spain, 1-\*321
- Etbai range**, mountains, Sudan, 5-127
- Ethiopia (Abyssinia)**, 5-131-35  
 facts and figures, 5-140
- Etna, Mount**, Sicily, 2-371, \*381; 7-388, \*\*391
- Euphrates River**, Iraq, 3-229; 7-268
- Europe**, peoples of, 7-241-43  
 "Toy States," 2-277-94  
 For list of articles, *see* Tables of Contents, Volumes, I, II, III
- European Coal and Steel Community (Schuman Plan)**, 1-262

# ALPHABETICAL INDEX

- European Recovery Program**, *see* Marshall Plan  
**Evangeline**, statue of, 6-49  
**Everest, Mount**, 4-147  
**Evzones**, Greek riflemen, 3-15  
**Examination Halls**, Peking, China, 4-321-22  
**Exeter**, town of England, 1-43  
     cathedral, 1-52  
**Explorations**, to Antarctica, 7-221-36  
     to Arctic Circle, 6-5  
     United States, pioneer period, 6-169, 171-72, 175, 177  
**Exports**, *see* Trade  
**Ezra**, biblical character, tomb of, Iraq, 3-218
- F**
- Fairs**  
     India, 4-47, 50  
     Leipzig, Germany, 2-140, 141  
     Nijni Novgorod, Russia, 3-145  
     *See also* Festivals  
**Falaise**, France, Castle, 1-274  
**Falconry**, sport of China, 4-295  
**Falkland Islands**, 1-174, 175, 176  
**Fallah**, Egyptian farmer, 5-96  
**Falmouth**, town of England, 1-44  
**Faneuil Hall**, Boston, 6-161  
**Fargo**, city of South Dakota, 6-362  
**Farmington**, town, Connecticut, 6-205  
**Fantasi**, Samoan boat, 5-285  
**Federal Republic of Germany**, 2-137-39  
**Federation of Malaya**, *see* Malaya  
**Féis**, Irish festival, 1-153  
**Faisal**, king of Iraq, 3-221  
**Faisal, King, Square**, Bagdad, 3-242  
**Faisal, King, Bridge**, Bagdad, 3-242  
**Feluccas**, Nile River boats, 5-108, \*125; 7-227  
**Fen Country**, English district, 1-47-48  
**Fernando Po**, island, 1-170, 176  
**Fertile Crescent**, agricultural area of Middle East, 3-287  
**Fertilizers**, nitrates, Chile, 6-177
- Festivals**  
     Australian corroborees, 5-352, 356  
     Austrian Tyrol, 2-225  
     Belgium, 1-218, 228  
     Bolivia, 7-116, \*\*127  
     Brittany, 1-270, 276  
     Burma, 4-157  
     China, 4-265  
     Czechoslovakia, 2-191  
     England, 1-228, 29, 38  
     Estonia, 2-180  
     Feast of the Sun, Norway and Sweden, 2-224  
     Germany, 2-118-20, \*136  
     India, 4-23, 40, 42, 62, 66; 7-369  
     Ireland, 1-153  
     Japan, 4-354  
         of flowers, Tokyo, 4-368  
     Madeira Islands, 1-163  
     Malaya, 4-195-96  
     Maronite, Lebanon, 3-313  
     medieval Venice, 2-360  
     Philippines, 5-316-18  
     Poland, 2-154, 164-65, 169  
     South Africa, 5-195, 199  
     Tibet, 4-126  
     United States, Western States, 6-294  
         rodeos, 6-296  
     Uruguay, 7-190  
     Wales, 1-89-90, \*91
- Festivals, religious**  
     Bagdad, 3-246  
     Czechoslovakia, 2-197  
     France, 1-276  
     Germany, 2-118  
     Greek, 3-23, 26  
     Japan, 4-361  
     Luxembourg, 2-283  
     Portugal, 1-360  
     Spain, 1-343  
     Switzerland, 2-273  
**Fez**, capital of Morocco, 5-8  
     carpenter's fountain, 5-16  
     shrine of Mulai Edris II, 5-17  
**Fiestas**, *see* Festivals  
**Figs**, Smyrna, 3-257  
**Fiji Islands**, 5-287, \*288  
     boats, 7-265  
     facts and figures, 5-301
- Filipinos**, people of Philippines, 5-316, 320  
     *See also* Philippine Republic  
**Finland**, 2-48-66  
     war with Russia, 3-145  
     facts and figures, 2-66  
**Finn MacCool**, legendary Irish hero, 1-129  
**Finnmark**, district of Norway, 2-19  
**Finns** in Russia (Karelians), 3-129, \*\*134  
     *See also* Finland  
**Fire tower**, Istanbul, 3-270  
**Fires**, monument to Great Fire, London, 1-69  
     Tokyo, Japan, 4-370-71
- Fish**  
     Italy, 2-326, 328  
**Fish Skin Tatars**, Manchuria, 4-283  
**Fishermen and fishing**, Alaska, 6-315  
     Australia, 5-346; 6-315  
     Australian aborigines, 5-348, \*357  
     Bahrein Islands, 3-372  
     Barbados, West Indies, 7-77  
     Bay of Naples, 2-304  
     Belgian Congo, 5-184  
     Belgium, 1-213, \*218  
     Borneo, 5-267  
     Brazil, 7-269  
     Burma, 4-157  
     Canada, 6-550, \*\*51  
         Atlantic Provinces, 6-45-48  
         British Columbia, 6-114, \*119  
         Newfoundland, 6-57  
         Nova Scotia, 6-52  
         Quebec, 6-76, 80  
     Ceylon, 4-168  
     Denmark, 2-98, 99  
     England, 1-227  
         boats, 1-226  
     France, 1-234, \*261, \*264  
     French West Africa, 5-30  
     Gaspé Peninsula, Quebec, 6-77  
     Iceland, 2-68, \*78, \*82  
     Ireland, 1-126, \*145  
     Italy, 2-321  
     Japan, 4-333, \*337, \*362  
     Java, Indonesia, 5-232  
     Korea, 4-376  
     Lake Ochrida, Yugoslavia-Albania, 3-77  
     Lebanon, 3-312-13  
     Manchuria, 4-283  
     Mexico, 7-12  
     Netherlands, 1-196  
     New Zealand, 5-364  
     Norway, 2-15, 19, \*22  
     Pacific islands, 5-276, \*280, 294-95  
     Pakistan, 4-78, \*79, 79-80  
     Peru, 7-121  
     Philippines, 5-312  
     Portugal, 1-350, 351, 355, \*357  
     Rhodes, island of, 3-22  
     Russia, 3-187  
     Scotland, 1-108, 112, \*121, \*\*123  
     Sicily, 2-375  
     Spain, 1-325  
     Sumatra, 5-226  
     Sweden, 2-336  
     Thailand, 4-199, 209  
     Turkey, 3-269  
     United States  
         Florida, 6-246  
         New England, 6-208  
         New York, 6-205  
         Northwest Indians, 6-301  
         Southern States, 6-233  
         Western States, 6-373  
     Uruguay, 7-193  
     Vietnam, 4-218  
     *See also* Whales and whaling
- Five Civilized Tribes**, American Indians, 6-21, 24  
**Five Year Plans**, Russia, 3-140  
**Flanders**, *see* Belgium  
**Flax**, carding in Finland, 2-57  
     drying in Azores, 1-173  
     harvesting in Yugoslavia, 3-74  
     Ireland, 1-141  
     New Zealand, 5-363  
     Rumania, 3-115  
     *See also* Linen  
**Flemings**, people of Belgium, 1-203, 207  
**Flin Flon**, Manitoba, mine, 6-117  
**Florence**, city, Italy, 2-319, \*320

# ALPHABETICAL INDEX

- Flores de Mayo** (Flowers of May), Philippine spectacle, 5-318
- Florida**, state, 6-244  
as winter resort, 6-247, 248  
cities, 6-338, \*344, \*345  
Miami, convention of Shriners, 6-163
- Flower industry**  
Bulgaria, 3-84, \*85  
France, 1-252, 256  
Monaco, 2-278
- Flowerpot Island**, Ontario, 6-422
- Flowers**  
gardens, California, 6-303  
Tokyo, Japan, 4-367, 369-70  
tulip field, Netherlands, 1-187  
white heather, Canada, 6-152  
*See also* Gardens
- Flying fish**, 7-77
- Folk dancing**, *see* Dancing
- Folk High Schools**, Denmark, 2-105-06
- Folk Museum**, Oslo, Norway, 2-6-7, \*\*21
- Food**, Afghanistan, 4-14  
Arabia, 3-380  
Argentine Indians, 7-212  
Armenia, 3-187  
Australian aborigine, 5-354-55  
Azerbaijan, 3-194  
Bagdad, 3-245  
Baltic States, 2-184  
Bedouins, 3-358  
Belgian Congo, 5-183  
Borneo, 5-266  
Burma, 4-157, 163  
China, 4-281  
Denmark, 2-95  
Egypt, ancient, 5-75, 78  
England, 1-29; 2-104-05  
Finland, 2-57  
France, 1-238  
Great Britain, 5-367  
Haiti, 7-89  
Iceland, 2-69  
Indochina, 4-216, 220, \*230  
Israel, 3-324, 326  
Italy, 2-305, 324, 326, 328  
Japan, 4-356, \*368  
Java, 5-232, 236  
Korea, 4-381  
Lebanon, 3-314, 317  
Manchuria, 4-283  
Mexico, 7-22  
Mongolia, 4-316  
North American Indians, 6-17, 20, 25, 28  
Pacific islands, 5-289-92, 294  
Pakistan, 4-300  
Philippines, 5-295  
Russia, 3-140, 154  
Scotland, 1-117  
Sicily, 2-383  
Sin-Kiang, 4-298  
Spain, 1-339  
Sweden, 2-43  
Turkey, 3-254  
United States  
for travelers, pioneer period, 6-154, 159, 163-64  
Uruguay, 7-189  
West Indies, 7-74
- Forbidden City**, Peking, China, 4-317, 324, \*\*331
- Forest Rangers**, United States, 6-400
- Forests**, Alaska, 6-313  
Australia, 5-327  
Borneo, 5-257, 268  
Brazil, 7-154, \*\*165  
Bulgaria, 3-92  
Burma, 4-149  
Canada, British Columbia, 6-112, 114  
Ontario, 6-93  
Quebec, 6-77  
Central America, 7-25  
Ceylon, 4-176, 181  
Chile, 7-138  
Cuba, 7-57, 60  
Czechoslovakia, 2-191  
Denmark, 2-102  
England, 1-28  
Ethiopia, 5-131  
Formosa, 4-244  
Guiana, 7-95, 96  
India, 4-25  
Indochina, 4-229
- Forests (continued):**  
Java, 5-225  
Kenya, 5-152  
Malaya, 4-191  
New Guinea, 5-271  
New Zealand, 5-362  
Nigeria, 5-143  
Norway, 2-19  
Paraguay, 7-171-72  
Philippines, 5-305  
Russia, 3-130  
Scotland, 1-108  
Siberia, 3-152  
Sweden, timber industry, 2-32, 35, \*39  
Switzerland, 2-268  
United States, 6-208, 377, 378, 380, 393, \*397  
Uruguay, 7-187-88  
Venezuela, 7-102  
*See also* Lumbering
- Formosa**, island, 4-233-48  
map, 4-234  
facts and figures, 4-248
- Fort Anne National Park**, Nova Scotia, Canada, 6-425, \*429
- Fort Beausejour National Park**, New Brunswick, Canada, 6-425
- Fort-de-France**, Martinique, 7-82
- Fort Garry (Winnipeg)**, Manitoba, 6-137
- Fort Raleigh**, North Carolina, 6-158
- Fort Snelling**, United States Army Post, 6-259
- Fort Sumter**, South Carolina, 6-237
- Fort Wayne**, city of Indiana, 6-350, 352, \*357
- Fort William**, city of Ontario, 6-133
- Fort York (Toronto)**, Ontario, 6-133
- Forum**, Rome, 2-345, \*347, 351
- Foyle River**, Ireland, 1-155
- France**, 1-229-65  
Antarctic base, 7-228, \*235  
Bartholdi's Goddess of Liberty, New York, 6-185  
Brittany, 1-266-89; 7-261, \*\*263, \*357  
overseas territories  
Africa, 5-6, 19-56, \*186, 187, 188  
Canada lost to, 6-33, 85, 380  
Corsica, 1-369, 383  
Indochina, 4-213-32  
influence in Morocco, 5-18  
joint authority over Andorra, 2-288  
Madagascar and nearby islands, 5-211-23  
Pacific islands, 5-276, \*279, 282, \*282, 284, 301  
West Indies, 7-61, 74  
French Union, 4-213, 220, 232  
gipsies, 7-305  
influence in Haiti, 7-85  
in Rumania, 3-105  
interference in Mexico, 7-12  
map, 1-230  
Normandy, 1-266-89  
paintings by prehistoric man, 7-249, \*249, \*\*250  
Paris, 1-290-304  
protection of Lebanon, 3-305, 307, 317  
protection of Syria, 3-291  
river gorges, 7-324, \*\*325  
war with Rif of Morocco, 5-15  
facts and figures, 1-265
- Francia**, Gaspar Rodriguez de, Paraguayan dictator, 7-179
- Francis Joseph**, emperor of Austria-Hungary, 2-238
- Franco**, General Francisco, Spanish dictator, 1-324
- Frankfurt-on-Main**, Germany, 2-114, \*115
- Franklin**, Benjamin, 6-164, 167  
statue, in Philadelphia, \*164
- Franks**, Teutonic tribe  
established in France, 1-231-32
- Fraunces Tavern**, New York City, 6-161
- Fray Bentos**, city, Uruguay, 7-189-90
- Freetown**, capital of Sierra Leone, 5-142, 147, 150
- Fremont**, John C., explorer of American West, 6-284
- French**, in Canada, 6-33, 41, 43
- French Africa**, *see* France, overseas territories
- French Broad River**, at Asheville, North Carolina, 6-226, \*\*227
- French Canadians**, of Quebec, 6-33, 65, 68-69, 77, 80



# ALPHABETICAL INDEX

- French Equatorial Africa**, 5-19, 22, \*186  
facts and figures, 5-188
- French Guiana**, 7-95, 96, \*98, 104  
facts and figures, 7-104
- French Guinea**, 5-19, 25, 32
- French Indochina**, *see* Indochina
- French Sudan**, 5-27, \*29
- French Union**, 4-213, 220, 264-65
- French West Indies**, 7-61, 74, \*82, 83
- Frenchman's Flats**, Nevada, atomic testing ground, 6-366
- Friendly Islands**, *see* Tonga Islands
- Frisians**, people, in Germany, 2-137
- Frontenac, Château**, city of Quebec, 6-73
- Fruit-growing**, California, 6-290  
Mexico, 7-13  
Ontario, Canada, 6-92  
Turkey, 3-253-54, \*257, \*261
- Fuel**  
Ireland, 1-150
- Fujiyama**, mountain in Japan, 4-\*\*\*335; 7-\*\*\*387
- Fukuoka**, Japanese town, 4-348
- Fulani**, Moslem African tribe, 5-143, 145
- Fulton, Robert**, builds submarine, 7-279, 282  
invention of steamboat, 7-272
- Funchal**, capital of Madeira Island, 1-163
- Functionalism**, style of architecture, in Germany, 2-117
- Fundy, Bay of**, 6-\*\*\*54
- Funen (Fyn)**, Danish island, 2-98
- Fur industry**, American Fur Company, 6-281  
Canada, 6-97, 100, \*115, 149-50, 401  
Germany, 2-\*\*\*116  
market, Turkestan, 3-176  
Siberia, 3-\*\*\*150  
transportation, Alaska, 7-\*\*\*313
- G**
- Gabrovo**, town of Bulgaria, 3-\*\*\*98
- Gaelic language**  
Scotland, 1-113
- Gaels**, ancient people of British Isles, 1-125
- Gafsa**, Central Tunisia, oasis, 7-\*\*\*332
- Galápagos Islands**, 7-113
- Galata Bridge**, Istanbul, 3-278
- Galicnik**, town of Yugoslavia, 3-\*\*\*73
- Galilee, Sea of**, 3-\*\*\*332
- Galleon**, sailing vessel, 7-271
- Gallieni, Joseph Simon**, in French Sudan, 5-23
- Gallonek, St.**, French legend of, 1-281
- Galveston**, city of Texas, 6-349
- Galway, County**, Ireland, 1-\*\*\*126
- Gambetta, Léon**, French statesman, statue to, 1-\*\*\*303
- Gambia**, British Africa, 5-150, \*150, \*\*153  
facts and figures, 5-172
- Gambia River**, Gambia, 5-150
- Games**, baigu, Sin-Kiang, 4-298, 301  
Cairo, Egypt, 5-\*\*\*126  
cat's cradle, Australian aborigines, 5-356  
*See also* Sports
- Gander Airport**, Newfoundland, 6-45, \*47
- Gandhi, Mohandas K.**, Hindu leader, 4-19
- Ganges River**, 4-25, \*\*64 \*\*65
- Garda, Lake**, Italy, 2-\*\*\*310
- Garden of Eden**, legend, 3-217
- Gardens**, Egypt, 5-\*\*\*95  
Embankment, London, 1-\*\*\*68  
floating gardens, Mexico, 7-\*\*\*10  
Japan, 4-\*\*\*338, \*\*339, \*\*343, \*\*350, \*\*355, \*\*359, 367, 369-70  
Magnolia Gardens, Charleston, S. C., 6-\*\*\*239  
Sicily, 2-\*\*\*380
- Garibaldi, Giuseppe**, in Sicily, 2-378
- Garibaldi Provincial Park**, British Columbia, 6-429
- Gaspé Peninsula**, Quebec, 6-65  
fishing fleet, 6-\*\*\*77  
Percé Rock, 6-\*\*\*68
- Gaspereau Valley**, Nova Scotia, 6-\*\*\*59
- Gasteiner Valley**, Austria, 2-\*\*\*220
- Gauchos**, one-time South American cowboys, 7-199, 202, \*206, \*\*213
- Gauls**, ancient people of France, 1-230-31
- Gautama Buddha**, *see* Buddhism
- Gdansk (Danzig)**, port, Poland, 2-\*\*\*171
- Gedi**, ruins of, Kenya, 5-\*\*\*151
- Geiranger Fiord**, Norway, 2-\*\*\*4; 7-\*\*\*351
- Geisha girls**, Japan, 4-\*\*\*371
- Gellivara**, Sweden, iron ore beds, 2-35
- Gems**, Ceylon, 4-165  
Zuñi turquoise and silver jewelry, 6-\*\*\*23
- General Assembly**, of the United Nations, 7-237-38
- Geneva**, Switzerland, 2-\*\*\*257, 274, 276
- Geneva, Lake**, Switzerland, 2-\*\*\*274
- Genoa**, city, Italy, 2-\*\*\*309, \*322
- Genoa, Gulf of**, 2-\*\*\*308, \*309
- George Town**, port of Penang Island, 4-\*\*\*192
- George Rogers Clark Memorial Bridge**, Louisville, Kentucky, 6-\*\*\*347
- Georgetown**, capital of British Guiana, 7-96
- Georgia (Georgian Soviet Socialist Republic)**, 3-181, 189-98  
map, 3-\*\*\*183  
facts and figures, 3-198
- Georgia**, state, 6-\*\*\*225, \*241  
cities, 6-337, 338, \*341, \*342  
facts and figures, 6-248
- Georgian Bay**, Ontario, 6-81, 93
- Georgian Bay Islands National Park**, Ontario, 6-422-23, \*422
- Gerlache, Adrien de**, Belgian Antarctic explorer, 7-223
- German Democratic Republic**, 2-139-43
- Germans**, in Canada, 6-44  
in Georgian Republic, 3-192  
in Italian Tyrol, 2-305  
in United States, 6-213  
*See also* Germany
- Germantown**, Pennsylvania, 6-\*\*\*222
- Germany**, 2-109-43  
and New Guinea, 5-273  
Berlin, 2-144-52  
former influence in Pacific, 5-286  
headquarters, 7-283, \*\*284  
in World War II, 1-203; 2-63; 3-79-80, 145  
map, 2-\*\*\*110  
migrations to Chile, 7-138  
partition of Poland, 2-172  
power over Baltic States, 2-173  
territory lost in World War I, 5-152, 169, 178, \*196, 206  
territory to Poland after World War II, 2-163
- Gersoppa Falls**, India, 7-\*\*\*349
- Gethsemane, Garden of**, 3-\*\*\*343
- Gettysburg**, Pennsylvania, 6-\*\*\*176
- Gevrey-Chambertin**, town of France, 1-\*\*\*245
- Geysers**, Iceland, 2-67  
Papakura, New Zealand, 5-\*\*\*382  
Yellowstone National Park, 6-385, \*\*387  
*See also* Hot springs
- Gezira**, island, Cairo, Egypt, 5-\*\*\*122
- Gezira**, region, Sudan, 5-128-29
- Ghats**, mountains, India, 4-22, 25
- Ghegs**, people of northern Albania, 3-45
- Ghent**, city, Belgium, 1-\*\*\*212, 215, \*215
- Ghurkas**, people of India, 4-\*\*\*56
- Giant Forest**, Sequoia National Park, 6-380
- Giant's Causeway**, Ireland, 1-\*\*\*153
- Gibraltar**, Rock of, 1-\*\*\*339
- Gilbert, Sir Humphrey**, colonization of Newfoundland, 6-43
- Gilberts and Ellice Islands Colony**, 5-285, \*\*298  
facts and figures, 5-301
- Gilles, Binche**, Belgium, merry-makers, 1-\*\*\*218
- Ginza**, main street of Tokyo, 4-366, \*366
- Gionism**, religion in Japan, 4-\*\*\*361
- Gipsies**, 7-297-306  
Hungary, 2-238  
Rumania, 3-117  
Yugoslavia, 3-\*\*\*68
- Giralda Cathedral**, Seville, Spain, 1-\*\*\*316
- Girgenti**, Sicily, Temple of Castor and Pollux, 2-\*\*\*376
- Gisborne**, New Zealand, 5-\*\*\*378
- Gizeh**, town of Egypt  
pyramids, 5-\*\*\*80, \*\*85, 87, \*\*88, 89  
sphinxes, 5-\*\*\*80, 82
- Glacier National Park**, British Columbia, 6-\*\*\*107, 406, \*413
- Glacier National Park**, United States, 6-\*\*\*376, 377, 388, \*\*390
- Glaciers**, Afghanistan, 4-\*\*\*9  
Briksdal Glacier, Norway, 7-\*\*\*352  
Canada, 6-5, \*\*99, \*\*107, 406  
effect in Alps, 7-\*\*\*321  
Glacier National Park and other glacial parks, United States, 6-388, 390-92, \*393  
Greenland, 2-75  
Iceland, 2-84, \*\*85

# ALPHABETICAL INDEX

## Glaciers (continued):

Switzerland, 2-253, 268  
 Glasgow, city, Scotland, 1-97, 100-01, \*109  
 university, 1-110  
 Glass manufacture, Belgium, 1-218, \*\*221  
 Bohemia, 2-194-95  
 Glassware, Sweden, 2-31  
 Gloucester, city of England, 1-44-45  
 Glyndebourne, England, opera festival at, 1-38  
 Goats, Canary Islands, 1-164  
 Switzerland, 2-2262, \*269  
 Gobi, desert, 4-5, 303, 305, 307; 7-335, 337, \*341  
 Goddess of Liberty, New York Harbor, 6-185  
 Goiania, city, Brazil, 7-159  
 Going-to-the-Sun Mountain, Glacier National  
 Park, 6-376  
 Gold, Australia, 5-331, 333, \*334  
 California, 6-285  
 gold rush, 6-184, \*196  
 Canada, 6-92-93, 112, 114, 147, 149  
 Klondike gold rush, 6-146  
 Yukon Territory, 6-145  
 Guiana, 7-96  
 New Guinea, 5-274  
 South Africa, 5-195  
 South Dakota, 6-260  
 United States, 6-292  
 Gold Coast Colony, British Africa, 5-144, 145,  
 147, \*\*160  
 Konkomba tribe headdress, 7-286  
 facts and figures, 5-172  
 Golden Gate Bridge, California, 6-321, 368  
 Golden Horn, Istanbul, 3-2277  
 Golden Stool, Land of the, Africa, 5-145, 147  
 Gomez, Juan Vicente, former president of  
 Venezuela, 7-101  
 Gorge, of, Switzerland, 7-318  
 Gondolas, Venice, 2-360, 362, 363, \*363, \*\*364,  
 \*\*365, 366, \*370; 7-2273  
 Goose Bay, airport, Labrador, 6-45  
 Gorna, town, Egypt, 5-90  
 Göta Canal, Sweden, 2-32  
 Göteborg, city, Sweden, 2-43  
 Gothic cathedrals, France, 1-235, \*239, 240,  
 245-46  
 Gothland, division of Sweden, 2-32  
 Goths, Italy, 2-335  
 Rumania, 3-105  
 Sweden, 2-25, 43  
 Gough Island, in Atlantic Ocean, 1-173  
 Graham Land, Antarctica, 1-174  
 Grain, caches, Angola, 5-181  
 elevators, Fort William, Ontario, 6-133  
 elevators, North Dakota, 6-268  
 threshing, Iran, 3-211  
 winnowing, China, 4-292  
 Granada, city of Spain, 1-309, 312  
 Albaicin, old Moorish suburb, 1-3315  
 Alhambra, 1-3307, \*\*310, \*311  
 gipsies, 7-2298  
 Grand Banks, Newfoundland, 6-45  
 Grand Canal, Venice, 2-3368  
 Grand Canyon, Arizona, 7-323  
 Yellowstone Park, 6-336  
 Grand Canyon National Park, 6-3381, 383, \*\*395  
 Grand Pré, Nova Scotia, 6-49  
 Grand River, Colorado, canyon of, 6-2299  
 Grand River, Ontario, gypsum mine, 6-93  
 Grand Tetons, mountains, western U. S., 6-392  
 Grande Corniche Drive, Riviera, 2-278  
 Granth, sacred book of Sikhism, 4-69  
 Grapes, Greece, 3-10  
 Grimsby, Ontario, Canada, 6-337  
 harvesting in Argentina, 7-201  
 harvesting in Armenia, 3-184  
 harvesting in Portugal, 1-3362  
 Italy, 2-305, \*326  
 packing in Malaga, Spain, 1-3322  
 Portugal, 1-3362  
 washing in Crete, 1-379  
 See also Wine  
 Grasse, town of France, 1-256  
 Great Banks, see Grand Banks  
 Great Barrier Reef, Australia, 5-323, \*326  
 Great Bear Lake, Canada, 6-147  
 Great Belt, Danish strait, 2-97  
 Great Britain  
 and division of India, 4-73  
 and Egypt, 5-93  
 and Iranian (Persian) oil, 3-204  
 England, 1-14-84

## Great Britain (continued):

food from New Zealand, 5-367  
 in World War II, 1-12  
 relations with Maoris of New Zealand, 5-  
 379-80  
 Scotland, 1-97-124  
 Wales, 1-85-96  
 See also Ireland  
 Great Divide Gate, Yoho National Park, Brit-  
 ish Columbia, 6-338  
 Great Dividing Range, Australia, 5-323  
 Great Lakes, North America, 6-81, 256  
 See also names of lakes as Erie, Lake  
 Great Mosque, Damascus, 3-286  
 Great pyramid, see Khufu, pyramid of  
 Great Rift Valley, Africa, 5-150-51, 163  
 Great St. Bernard Pass, Switzerland, 2-253  
 Great Salt Lake, Utah, 6-285  
 Great Slave Lake, Canada, 6-148  
 Great Smoky Mountains, U. S., 6-232, 380  
 Great Wall of China, 4-2250, 252, \*\*278  
 Great White Throne, Zion Nat. Park, 6-3398  
 Greece, 3-4-26  
 amphitheater, Sicily, 2-381  
 Athens, 3-27-44  
 colonies in Sicily, 2-377  
 conquest of Syria, 3-288  
 gipsies, 7-297  
 headdress, 7-283  
 islands in Mediterranean, 1-3370, 378, \*379,  
 380, 381  
 temple ruins, Sicily, 2-3376  
 facts and figures, 3-26  
 Greeks  
 sphinxes of, 5-79, \*82  
 See also Greece  
 Green Gables, House of, Prince Edward Island,  
 6-417  
 Green Mountains, Vermont, 6-208  
 Greenland, 2-67-89, \*72; 6-5  
 Eskimos, 2-73, 74  
 map, 2-68  
 facts and figures, 2-87  
 Greenville, Liberian seaport, 5-135  
 Greenwater Lake Park, Saskatchewan, 6-429  
 Grimsby, Ontario, Canada, 6-3382, \*\*37  
 Groote Schuur (Great Barn), official residence,  
 South Africa, 5-196  
 Gropius, Walter, German designer, 2-114  
 Gruenwald, section of Berlin, 2-145  
 Guadalcanal, Pacific island, 5-285  
 Guadalupe Mountains, caverns of, 6-392  
 Guam, Pacific island, 5-285-86, \*295, \*300, 301  
 Guarani Indians, Paraguay, 7-179-80  
 Guatemala, republic of Central America, 7-  
 \*\*27, 29, \*\*30, 32  
 Indians, 7-309  
 weaving, 7-360  
 facts and figures, 7-42  
 Guatemala City, 7-29, 32  
 Guayaquil, seaport of Ecuador, 7-113  
 Gndbrandsdal, Norwegian valley, 2-8  
 Gufa, boat, 3-228; 7-267, \*268  
 Guiana, British, 7-95, 96, 104  
 Guiana, French, 7-95, 96, \*98, 104  
 Guinea, French, 5-19, 25  
 facts and figures, 5-32  
 Guinea, Gulf of, islands in, 1-170, 176  
 Guiscard, Robert and Roger, conquerors of  
 Sicily, 2-377  
 Gujarat, India, temple, 4-557  
 Gulf of Mexico  
 bayous, 6-237  
 Gulf Stream  
 influence on Norway, 2-5  
 influence on Scotland, 1-97  
 Gum arabic, Sudan, 5-129  
 Gustavus Vasa, king of Sweden, 2-25, 32  
 Gwalior, India  
 palaces, 4-320  
 Gypsies, see Gipsies  
 Gypsum, mining in Canada, 6-93  
 Gyroscope, on ships, 7-282

## H

Haarlem, city of Netherlands, Amsterdam  
 gate, 1-201  
 Hadassah Medical Center, Jerusalem, Israel,  
 3-330  
 Hadrian, Arch of, Athens, 3-228  
 Hadrian's Wall, England, 1-21, 46, \*46

# ALPHABETICAL INDEX

- Hagia Sophia**, Istanbul, 3-\*\*268  
**Hague**, The, city, Netherlands, 1-\*\*183, \*188, 192  
**Haifa**, port, Israel, 3-323, \*327  
**Haiphong**, port, Indochina, 4-229  
**Haikdressing**, Arabia, 3-355  
**Turkey**, 3-251  
**Haiti**, island in West Indies, 7-84-93  
 facts and figures, 7-93  
**Haiti, Republic of**, 7-84-89  
**Hakata**, Japanese town, 4-348  
**Hakozaki Bay**, Japan, 4-348  
**Halemaumau**, volcano, Hawaii, 7-388  
**Half Dome**, Yosemite National Park, 6-384  
**Halifax**, capital of Nova Scotia, 6-46, 48, 121, \*123  
**Hall of Classics**, Peking, China, 4-\*\*330  
**Hall of Private Audience**, Delhi, India, 4-\*\*31, \*\*44  
**Hallingdal**, Norwegian valley, 2-10  
**Hama**, city of Syria, 3-289  
**Hamburg**, city of Germany, 2-112  
**Hamilton**, capital of Bermuda Islands, 1-168  
**Hamilton**, city of Ontario, 6-128-29, \*134  
**Hammerfest**, city of Norway, 2-19  
**Hammock-taxi**, Madeira, 1-159  
**Hammurabi**, Babylonian king, 7-253  
**Hana region**, Czechoslovakia, 2-201  
**Handicrafts**  
 of North American Indians, 6-28-29  
*See also* Crafts; Industries; Manufactures  
**Hanford**, Washington, 6-280  
**Hanoi**, city, Indochina, 4-229  
**Hanseatic Wharf**, Bergen, Norway, 2-15  
**Hapsburgs**, Austrian ruling family in Hungary, 2-237-38  
 Switzerland's struggles against, 2-264  
**Harbin**, Manchuria, flax mill, 4-284  
**Harbors**, *see* names of ports  
**Hardanger Fiord**, Norway, 2-15  
 old costume, 2-13  
**Hari Parbat**, fort, Kashmir, India, 4-111  
**Harlech Castle**, Wales, 1-86  
**Harp**, Irish, 1-144, 147  
**Harper's Ferry**, West Virginia, 6-\*\*230  
**Hartford**, capital of Connecticut, 6-326, \*331  
**Harun-al-Rashid**, Caliph, Bagdad, 3-237  
**Harvard College Yard**, Cambridge, Massachusetts, 6-\*\*223  
**Harvesting**, *see* Agriculture  
**Hashish**, Eastern drug, 3-297  
**Hastings**, town of England, 1-34  
**Hathaway, Anne**, cottage at Shottery, England, 1-40  
**Hathor**, Egyptian goddess, 5-68  
 temple of, Dendera, Egypt, 5-65  
**Hats**, 7-283-96  
*See also* Headdresses  
**Hatshepsut**, queen of Egypt, 5-60  
 temple built by, 5-58  
**Hatton**, North Dakota, grain elevators, 6-268  
**Hauran**, Plain of, Syria, 3-287  
**Hausa**, Moslem African tribe, 5-143, \*149  
**Havana**, capital of Cuba, 7-53  
 cathedral, 7-57  
 Gomez Monument, 7-56  
 Malecon Drive, 7-56  
 Morro Castle, 7-58  
 new capitol, 7-59  
 tobacco factory, 7-46  
**Hawaii**, one of Hawaiian Islands, 6-309, 312  
**Hawaii National Park**, 6-312  
**Hawaiian Islands**, 5-282-83; 6-305-13; 7-388-89  
 volcanoes, 7-392  
 facts and figures, 6-316  
**Head-hunting**  
 Borneo, 5-257, 264, 268, 270  
 Formosa, 4-235, 243  
**Headdresses**, 7-283-96  
 Afghanistan, 4-8  
 American Indian, 6-\*\*22, \*\*27, \*\*30, \*\*282  
 Bedouins, 3-351, \*364  
 Belgium, Binche carnival, 1-218  
 Brazil, 7-153  
 Brittany, 1-273  
 Bulgaria, 3-92  
 Canary Islands, 1-171  
 Ceylon, 4-182  
 Czechoslovakia, 2-208-09  
 Egypt, 5-62, \*63, \*105  
 French Equatorial Africa, 5-19  
**Headdresses (continued)**  
 Germany, 2-126, \*\*127  
 Greece, 3-20  
 Hungary, 2-251  
 Inner Mongolia, 4-304  
 Iraq, 3-217, 236  
 Israel, 3-336  
 Jordan, 3-345  
 Kashmir, 4-108  
 Korea, 4-380  
 Madagascar, 5-216  
 Malaya, 4-187  
 Mexico, 7-23  
 Morocco, 5-11  
 New Guinea, 5-272  
 Pakistan, 4-79  
 Peru, 7-118  
 Poland, 2-162  
 Russia, 3-141  
 Sinkiang (Sin-Kiang), 4-298, \*302  
 South Africa, 5-206  
 Spain, 7-245  
 Tibet, 4-118, \*\*121  
 Turkistan, 3-173  
 Turkey, 3-251  
 Wales, 1-87  
**Health and sanitation**  
 Lebanon, 3-317  
 Mexico, 7-15-16  
 Syria, 3-304  
**Hearn, Samuel**, British explorer in Canada, 6-145  
**Heather**, Scotland, 1-\*\*99  
**Hebrews**, *see* Jews  
**Hebrides**, Scotch islands, 1-112, 117, \*\*122  
**Hector, Sir James**, geologist  
 discoveries in Western Canada, 6-402-03, 404  
**Hedge schools**, Ireland, 1-155  
**Hedun**, Dr. Sven, explorations in Turkestan, 4-302  
**Heidelberg**, Germany, 2-128  
**Hekla**, volcano, Iceland, 2-67  
**Helena**, capital of Montana, 6-363  
**Helicopters**, 7-311  
**Hellenes**, ancient name of Greeks, 3-5  
**Helsinki (Helsingfors)**, capital of Finland, 2-60, \*61, 66  
 railway station, 2-65  
 Suurkirkko (Great Church), 2-65  
**Hemp**, Borneo, 5-269  
 Manila hemp, 5-305, \*312  
**Henequen**, fiber for making rope  
 Cuban plantation, 7-48  
**Hennepin, Louis**, discovered Niagara Falls, 7-343  
**Henry IV.** king of France, 1-234  
**Henry VIII.** king of England and Ireland, 1-137, 147  
**Heros**, tribe of South Africa, 5-206, \*207  
**Hermitage**, Russian museum of art, 3-147  
**Hernandarias (Hernando Arias de Saavedra)**, early governor in Paraguay, 7-173-74  
**Herodes Atticus**, builder of the Odeum, at Athens, 3-32-33, 44  
**Herschel Island**, Canada, 6-146  
**Herzegovina**, part of Yugoslavia, 4-57, \*\*63, \*\*66, \*\*67, 79  
 map, 3-60  
 underground river, 7-319  
**Hexham**, town of England, 1-46  
**Hideyoshi**, Japanese general, in Korea, 4-373  
**High Tatra**, Carpathian Mountains, 2-155, 216  
**Highlands**, Scotland, 1-119, \*\*98, \*\*99, 101, 104-05, 108, 112-13, 117, \*117  
 cattle, 1-111  
**Hilversum**, city, Netherlands, 1-189  
**Himalaya Mountains**, 4-25, \*55  
 Afghanistan, 4-5  
 India, 4-114  
 lama musicians of, 4-127  
 Tibet, 4-139  
**Hindi**, language of India, 4-67  
**Hindu Kush**, mountains, Asia, 4-77  
**Hinduism**, religion, 4-40, 71, 73-75  
 Bali, Indonesia, 5-245, 254  
 influence in Java, 5-250  
 Kali, temple of, 4-72  
 pilgrims at Ganges River, 4-64-66  
 ruined temple, Martand, 4-107  
 temple at Jaipur, 4-32

# ALPHABETICAL INDEX

## Hinduism (continued):

- temple in Gujarat, 4-\*\*57
- temple on Trinidad, 7-\*\*69
- See also Jainism; Sikhism
- Hippopotami, in Zambezi River, 5-\*\*168
- Hirakud Dam, India, 4-\*\*29
- Hiroshima, city, Japan, 4-\*\*353
- Hispaniola, see Haiti, Dominican Republic
- Hitler, Adolf, 2-151, 217
- Hittites, ancient people of Asia, 7-257
- invasion of Syria, 3-287-88
- sculpture, 3-290
- sphinxes of, 5-87
- Hobart, capital of Tasmania, 5-\*\*346
- Hoch-Osterwitz Castle, Austria, 2-\*\*218
- Hofer, Andreas, Tyrolean hero, 2-221
- Hohen-Salzburg, citadel of Salzburg, Austria, 2-\*\*231, \*\*232
- Hohenzollerns, German ruling family, 2-146, 150
- Hokkaido, island, Japan, 4-337, \*340
- Hokoto Islands, 4-248
- Holi, festival, India, 4-66
- Holidays
  - Fourth of July in Denmark, 2-99, 102
  - Italy, 2-245, 350
  - Montenegro, 3-61
  - Philippines, 5-316-18
  - Spain, 1-341, 343
- See also Festivals
- Holland, John, builder of submarines, 7-282
- Holland, see Netherlands
- Hollinger Mine, Ontario, Canada, 6-93
- Hollywood, California, 6-372, \*373
- Holy Cross, Mount of, Colorado, 6-\*\*298
- Holyrood Palace, Edinburgh, Scotland, 1-\*\*106, 121
- Homespun fabrics, 7-361
- Homs, city, Libya, 5-\*\*38
- Honduras, British, 7-32-33
  - For Facts and Figures, see Statistical Summary, 7-42
- Honduras, Republic of, 7-26, \*28, \*32, 33
  - Maya ruin at Copan, 7-\*\*26
  - facts and figures, 7-42
- Honfleur, town of France, 1-289
- Hong Kong, China, 4-272, \*273, \*276, \*287, 288
- Honolulu, capital of Hawaiian Islands, 6-309
- Honshu, Japanese island, 4-348, 360
- Hooker, Richard, statue at Exeter, 1-52
- Hooker River, New Zealand, 5-358
- Hoover Dam, Arizona, 6-288
- Hop-raising, Australia, 5-347
- Hopi Indians, United States, 6-274
- Horn Dance, Staffordshire, 1-29
- Horses, 7-310
  - Arabian horses, 3-350
  - Australia, 5-337
  - Belgium, 1-218, \*227
  - Egypt, 5-93
  - Ethiopian ponies, 5-133
  - Iceland ponies, 2-76
  - Mongolia, wild horses, 4-311, \*315
  - Paraguay, 7-175
  - Russia, 3-139
  - shoeing, Sinkiang (Sin-Kiang), 4-296
  - South Africa, 5-205
  - United States, 6-292
    - travel by horseback, pioneer period, 6-154
    - western mustangs, 6-193
- Horseshoe Falls, Canada, 6-39
- Horunger Mountains, Norway, 2-\*\*17
- Horus, Egyptian sun-god, temple of, 5-69
- Hot houses, Iceland, 2-78
- Hot Springs, health and resort center, Arkansas, 6-348, 383
- Hot springs, Iceland, 2-78
  - New Zealand, 5-362, \*382, \*383
- See also Geysers
- Hôtel de Ville, Paris, 1-299
- Hottentots, people of South Africa, 5-201
- Houle, wave in Atlantic Ocean, 1-159
- House decoration
  - blankets, Navaho, 6-\*\*18
  - rugs, Pakistan, 4-86
- Houseboats, Egypt, 5-114
  - Kashmir, 4-115
- Houses, Afghanistan, 4-15
  - Albania, 3-45
  - Alberta, Canada, 6-39
  - Algeria, 5-37

## Houses (continued):

- American Indians, 6-21, 28, \*28, 29
- Andorra, 2-\*\*293
- Annam, 4-223
- Arabia, 3-3370, 377
- Argentina, 7-219
- Armenia, 3-187
- Bagdad, 3-241
- Bavaria, Germany, 2-\*\*122
- Belgian Congo, 5-182-83, \*184
- Belgium, 1-\*\*204, \*\*205, \*\*212
- Borneo, 5-268-69
- Brazil, 7-155
- Brittany, 1-271
- Bulgaria, 3-97, \*100
- Burma, 4-151
- caves, Cappadocia, 3-250
- Celebes, 5-248
- colonial types, United States, 6-206, \*207, \*\*222
- Cuba, 7-45
- Curacao, 7-63
- Cyprus, 1-380
- Czechoslovakia, 2-199, \*202, \*212
- Dominican Republic, 7-33
- Ecuador, 7-113
- Egypt, 5-102, \*115
  - ancient, 5-75, 78
- El Salvador, 7-33, 35, \*35
- England, 1-34, \*40, \*42, 45, \*49, \*\*50
- Eskimos, 2-70; 6-12, 13, \*13, 29
- Finland, 2-53, \*65
- Formosa, 4-234
- French Equatorial Africa, 5-186
- Georgian Republic, 3-192
- Germany, 2-\*\*131
- Greenland, 2-76
- Haiti, 7-88
- Havana, 7-53
- Hong Kong, 4-273
- Hungary, 2-242
- Iceland, 2-69
- Indian, American, 7-103
- Indochina, 4-230
- Indonesia, 5-228, \*229
- Iran, 3-205
- Iraq, 3-224, 228, \*235
- Ireland, 1-\*\*127, \*138, \*144
- Israel, 3-326, \*328
- Japan, 4-3347, \*\*354, \*\*358
- Java, 5-231-32
- Jordan, 3-346
- Kashmir, 4-104, \*115
- Korea, 4-375, \*376, 380-81
- Lebanon, 3-314
- Liberia, 5-139
- Madagascar, 5-215, 216
- Malaya, 4-196
- Manchuria, 4-285
- Mexico, 7-16
- Montreal, Canada, 6-129
- Morocco, 5-6, \*11, \*14
- Netherlands, 1-\*\*179, \*\*182, \*\*190, \*\*191, 195, \*\*196, \*\*197
- New Guinea, 5-274
- New Zealand, 5-368
- Nigeria, 5-148
- Normandy, 1-288
- Northern Rhodesia, 5-170
- Pacific Islands, 5-296
- Pakistan, 4-82
- Peru, 7-119, 121
- Philippines, 5-3306, \*\*307
- prehistoric
  - Arizona, 6-382
  - Puerto Rico, 7-80
  - Rome, modern apartments, 2-348
  - Rumania, 3-116-17
  - Russia, 3-142, \*154
  - Santiago, 7-\*\*54
  - Scotland, 1-97, \*113
  - Sicily, 2-3372, \*374, 383
  - Sinkiang (Sin-Kiang), 4-290, 298
  - Slovakia, 2-212
  - South Africa, 5-193, 195, \*196, \*198, \*205
  - Spain, 1-320
  - Sumatra, 5-252
  - Switzerland, 2-264, \*271
  - Syria, 3-303-04
  - tents
    - Arabia, 3-354, 380

# ALPHABETICAL INDEX

- Houses (continued):**  
 Mongolia, 4-316  
 of Bedouins, 3-358-59, \*359  
 of Lapps, 2-\*\*45  
 of Turcomans, 3-167  
 Thailand, 4-199, \*\*203  
 Turkey, 3-247, \*262, \*\*280  
 United States  
   colonial types 6-159, \*164, \*168, \*169,  
     \*171, \*173, \*174  
   Huguenot house, New York, 6-166  
   Pennsylvania "Dutch" barn, 6-172  
   sod houses, prairies, 6-179  
 Uruguay, 7-188, 193  
 Venezuela, 7-101, \*103  
 Yugoslavia, 3-73  
 Zulu, South Africa, 5-204
- Houses of Parliament**, London, 1-\*\*79, \*81  
*See also* Parliament
- Houston**, city of Texas, 6-348-49, \*349
- Hovas**, people of Madagascar, 5-211
- Huancabamba River**, Peru, 7-121
- Huacos**, cowboys, Chile, 7-137
- Hudson River**, New York, 6-166, 212
- Hudson's Bay Company**, fur traders, Canada,  
 6-97, 100, 145-46
- Hue**, city, Indochina, 4-223, \*223
- Humboldt Current**, 7-118
- Hume Dam**, Australia, 5-343
- Hungary**, 2-236-52  
 map, 2-238  
 facts and figures, 2-252
- Hunting**  
 Eskimos, 6-10, \*11  
 Russia, 3-130
- Huntington**, city of West Virginia, 6-337
- Hurricanes**  
 West Indies, 7-61, 64-65
- Huskies** (dogs), 2-72
- Hwang Ho**, river, China, 4-273
- Hyde, Douglas**, first president of Ireland, 1-137
- Hyde Park**, London  
 Wellington Arch, 1-68
- Hyderabad**, state, India  
 Daulatabad Fortress, 4-\*\*21
- Hydroelectricity**, *see* Water power
- I**
- Ibadan**, city, Nigeria, 4-143
- Ibans** (or **Sea Dayaks**), tribe of Borneo, 5-269-70
- Iberian Peninsula**, *see* Portugal and Spain
- Ibn Saud**, nationalist in Arabia, 3-365
- Ibo**, African tribe, 5-143
- Ice breakers**, 7-282
- Icebergs**, 6-4  
 Greenland, 2-69
- Iceland**, 2-67-89  
 map, 2-68  
 facts and figures, 2-87
- Idaho**, state, 6-273-94, \*295  
 cities, 6-364, \*366  
 facts and figures, 6-294
- If, Château d'**, France, 1-258
- Ifugao rice terraces**, Philippines, 5-313-14, \*319
- Igorots**, Philippine group, 5-304; 7-366
- Iguassu Falls**, South America, 7-208-09, 214
- Ijsselmeer**, Netherlands, 1-192, \*199
- Île de la Cité**, Paris, 1-291, 292, \*296-97
- Île Saint-Louis**, Paris, 1-299
- Illecillewaet Glacier**, British Columbia, 6-107, 406
- Illinois**, state, 6-255, 256  
 cities, 6-320, \*350, \*351, 352, \*352, 353  
 facts and figures, 6-265
- Illinois River**, Starved Rock, 6-271
- Ilongots**, Philippine group, 5-310
- Imatong Mountains**, Sudan, 5-127
- Imeria**, province of Madagascar, 5-211
- Immigration**, Argentina, 7-200  
 Canada, 6-100  
 British Columbia, 6-117  
 Ontario, 6-85, 88-89  
 New Zealand, 5-371  
 Paraguay, 7-179  
 United States, 6-154, 205, 228, 249, 251, 289-90
- Imports**, *see* Trade
- Incas**, American Indians, Bolivia and Perú,  
 7-117-32, 264  
 Ecuador, 7-109
- Inchcape (Bell) Rock lighthouse**, Scotland, 1-121
- Independence Hall**, Philadelphia, 6-165, \*\*186
- India, Republic of**, 4-19-69  
 bullock-carts, 7-307  
 elephants, 7-368, 369, 371, 374, \*374, \*376,  
   \*377, \*\*378, \*\*379, \*\*383  
 Gersoppa Falls, 7-349  
 gipsies, 7-297  
 Indian Embassy, Nepal, 4-122  
 Kashmir, 4-101-18  
 map, 4-22  
 population, 4-22; 7-241  
 relations with Tibet, 4-119  
 weaving, 7-362, 364  
 facts and figures, 4-67
- Indian Ocean**, Muscat, port, 3-3376
- Indiana**, state  
 cities, 6-250, \*318, 350, 352, \*356, \*357  
 facts and figures, 6-265
- Indianapolis**, capital of Indiana, 6-250, 350, \*356
- Indians, American**, 6-17-32, 280-81; 7-242-43, 264  
 Alaska, 6-315-16; 7-364  
 Apaches, 6-279  
 Argentina, 7-199, \*\*212  
 Aztecs, Mexico, 7-11  
 Brazil, 7-149, 151, \*159  
 Canada, 6-7, \*15, 45, 88, 104, 151  
 canoe-making, 7-270  
 Central America, 7-25, \*\*26, 27, 28, 29, 31, 32  
 Chile, 7-133, 138-39  
 Chunchos, Peru, 7-316  
 Ecuador, 7-109-11, \*114  
 Guatemala, 7-309  
 Guiana, 7-95, 99  
 Hopis, 6-274  
 Incas, 7-109, 117-33, 264  
 Iroquois, 6-26  
 Mayas, pyramid of, 7-11  
   sphinxes of, 5-87  
 Mexico, 7-4, 8-9, \*12  
 Navahos, 6-18, \*\*19, \*\*22; 7-359  
 Northwest, 6-301  
 Northwest Coast totem poles, 6-331  
 Paraguay, 7-170, 173-75, 179-80  
 Peruvian, 7-119  
 Pueblos, 6-278, \*\*282; 7-358  
 Seminoles, 6-27  
 Sioux, 6-320  
 United States  
   in pioneer period, 6-154, 171-72, \*199, 200  
 Walapais, 6-275  
 West Indies, 7-65  
 Zuñis, 6-23  
*See also* Eskimos
- Indochina**, 4-213-32  
 loss of territory to Siam, 4-212  
 map, 4-217  
 relations with France, 1-265  
 facts and figures, 4-232
- Indonesia, Republic of**, 5-225-56  
 and New Guinea, 5-273  
 bamboo cart, 7-308  
 territory in Borneo, 5-260, \*265, 266  
 transportation, 5-228  
 weaving, 7-362  
 facts and figures, 5-256
- Indus River**, 4-75, 77, 79, \*85, 96
- Industries**  
 Albania, 3-53  
 ancient Lebanon, 3-305  
 Andorra, 2-291  
 Australia, 5-329, \*331, \*333, 334, \*335, 339  
 Azerbaijan, Russian, 3-196  
 Bahrain Islands, 3-377  
 Belgium, 1-213, \*214, 218, \*\*221, \*\*224, 225  
 Bolivia, 7-118  
 Borneo, 5-257, 264-66  
 Brazil, 7-151, \*155, \*158, \*162, 163, \*\*165, 166-67  
 Bulgaria, 3-85, 104  
 Canada, 6-36, 39, 41, \*60, \*108, \*115, \*116  
 Atlantic Provinces, 6-44-45, 48  
 British Columbia, 6-119  
 Maritime Provinces, 6-54  
 Newfoundland, 6-56, \*57  
 Ontario, 6-89, 92-93, 96, 128-29, 130, 131, \*133, \*134



# ALPHABETICAL INDEX

## Industries (continued):

Prairie Provinces, 6-104, 105, 108-09, 112, 114, \*118, 134  
 Quebec, 6-69, 73, 76  
 Yukon and Northwest Territories, 6-149-50  
 Central America, 7-25, \*\*30, 33, 37  
 Chile, 7-144, 145, \*146  
 China, 4-269, 273, \*276, 277, \*281  
 Colombia, 7-107-08, \*109  
 Corsica, 1-373  
 Cuba, 7-45-52, \*47  
 Czechoslovakia, 2-194-95, \*198, 201, 209, \*211, \*213, \*214  
 Denmark, 2-97, \*106  
 Ecuador, 7-111-13  
 Egypt, 5-104, \*124  
 England, 1-44, \*45, 46  
 Eritrea, 5-136  
 Finland, 2-60, \*61  
 Formosa, 4-238, \*240, 243-44, 247-48, \*247  
 France, 1-232, \*236, \*252, \*253, 256, 262  
 Germany, 2-113, \*116, \*119, \*137, 138, \*139, 141, \*141, 143  
 Gold Coast, 5-144, 147  
 Greece, 3-8  
 Haiti, 7-86  
 Honduras, 7-32  
 Hungary, 2-244  
 Iceland, 2-69  
 India, 4-37, 54, 58, \*62, \*110  
 Indochina, 4-228  
 Indonesia, 5-252, \*252  
 Iran, 3-203-04, \*207, \*214  
 Iraq, 3-233, \*239  
 Ireland, 1-141, \*150  
 Israel, 3-331, \*334, \*335  
 Italy, 2-302, 305, \*323, \*325, \*328  
 Japan, 4-333, \*344, \*357, \*362; 7-363  
 Java, 5-227, 237  
 Jordan, 3-340, \*346  
 Kashmir, 4-105, 116  
 Latvia, 2-174  
 Lebanon, 3-314, \*322  
 Lithuania, 2-183  
 Luxembourg, 2-291  
 Madagascar, 5-223  
 Madeira Islands, 1-172  
 Malaya, 4-185-89, 191, \*193, \*195  
 Manchuria, 4-284, 285  
 Mexico, 7-7, 12, 14, \*20  
 Middle East, 3-229  
 Mongolia, 4-308, \*314  
 Netherlands, 1-177, \*178, \*180, \*\*186, \*\*187, \*188, \*192, \*194, \*195, 198-99  
 New Guinea, 5-274  
 New Zealand, 5-267  
 Nigeria, 5-143  
 Northern Rhodesia, 5-163, \*171  
 Norway, 2-7-8, \*11, 14-15, 18, 19  
 Pacific islands, 5-290-91, \*293, \*\*299, 300, \*300  
 Pakistan, 4-80, \*86, \*87  
 Philippines, 5-312  
 Poland, 2-163, \*167  
 Portugal, 1-347  
 Rumania, 3-108, \*112, \*113, \*114, \*117  
 Russia, 3-136, 139, \*145, \*149  
 Siberia, 3-152, 155  
 Russian Armenia, 3-189  
 Scotland, 1-97, 100-01, 104-05, 108, 112-13, \*\*115, 117, 120  
 Seychelles, 5-163  
 Sicily, 2-377, 378, \*379, 382  
 South Africa, 5-189, \*192, 195, \*199, 200-03, \*203, 206, 210  
 Spain, 1-329, \*336  
 spinning and weaving, 7-353-67  
 Sudan, 5-128-29  
 Sweden, 2-31, 32, 35  
 Switzerland, 2-267, 268  
 Syria, 3-300  
 Turkistan, 3-171  
 Turkey, 3-252, \*254, \*255, 256, \*258, \*275, \*282  
 Uganda, 5-155  
 United States, 6-251  
 cotton manufacture, 6-242  
 industrialization effects, 6-204-05  
 Middle West, 6-260, \*261  
 Minnesota, 6-257  
 movie industry, 6-285

## Industries (continued):

North Central States, 6-265, 350, 352-53, \*355, 357, 362  
 Northeastern States, 6-323-24, \*324, 326, 328, \*330, 333, 336  
 Southern States, 6-233, 337-39, \*342, 348, \*348  
 tobacco, 6-223  
 Vermont, 6-210  
 Western States, 6-290, 292, 366, 368, 372  
 Wisconsin, 6-264  
 Uruguay, 7-193, 196  
 Wales, 1-92-96, \*93, \*95  
 West Indies, 7-63, \*68, \*73, 74, 79, \*79  
 Yugoslavia, 3-69  
 See also Crafts; Manufactures  
 Inland Sea, Japan, 4-334, \*\*342  
 Inle, Lake, Burma, 4-157  
 Inner Mongolia, 4-304, \*313, 314-15  
 Inns, in pioneer days, United States, 6-162, 163-64, 167, \*169  
 Innsbruck, town of Austria, 2-227, 228, \*233  
 Interlaken, town in Switzerland, 2-271  
 International Court of Justice, of the United Nations, 7-237, 240  
 International Geographical Union, work of, 1-11-13  
 International Map of the World, 1-11-13  
 International Peace Garden, Manitoba and North Dakota, 6-428  
 International relations  
 tourism  
 Italy, 2-305, 309  
 United Nations, 7-237-40  
 See also Trade  
 Intramuros, old part of Manila, 5-315  
 Inverness, city, Scotland, 1-117  
 Ionian Islands, Corfu, 1-370  
 Iowa, state, 6-249, 252  
 Cedar River, 6-263  
 cities, 6-252, \*353, 357, 362  
 corn farming, 6-260  
 facts and figures, 6-265  
 Iquitos, port of Peru, 7-125  
 Irala, Domingo Martinez de, early Spanish viceroy in South America, 7-173  
 Iran (Persia), 3-199-216; 7-256, \*256, \*\*259, \*\*339  
 ancient art, 7-256, \*\*259  
 map, 3-200  
 oil pipelines, 7-339  
 Persian conquest of Armenia, 3-183  
 Persian conquest of Syria, 3-288  
 spinning, 7-361  
 Tajiks in Turkistan, 3-169  
 facts and figures, 3-216  
 Iraq, 3-217-36  
 ancient art, 7-253  
 Bagdad, 3-237-46  
 spinning, 7-363  
 facts and figures, 3-236  
 Ireland, Republic of, 1-125-56  
 flag, 1-144, 147  
 map, 1-128  
 facts and figures, 1-156  
 See also Northern Ireland  
 Iriania, western New Guinea, 5-273  
 Irish, in Canada, 6-41  
 Irish Free State, 1-140, 144  
 Irkutsk, city of Siberia, 3-152, 155  
 Iron, Belgium, 1-218  
 Cuba, 7-49  
 first use in shipbuilding, 7-275  
 Mexico, 7-14  
 Newfoundland, 6-45  
 Sweden, 2-35  
 Venezuela, 7-102  
 Iron Gates, of Danube, Rumania, 3-109  
 Iron Mountain, Florida, Singing Tower, 6-244  
 Iroquois, American Indians, 6-26  
 Irrawaddy River, 4-149, 150  
 Irrigation  
 Africa, 5-22, 78; 7-317  
 Arabia, 3-331  
 Argentina, 7-214  
 Armenia, 3-186-87  
 Bolivia, 7-118  
 Canada, 6-109  
 Ceylon, 4-2170  
 China, 4-282  
 Colombia, 7-107

# ALPHABETICAL INDEX

## Irrigation (continued):

- Colorado, 6-290, 292, 295
- Egypt, 5-98
- Gulf Coast, 5-144
- in deserts, 7-337
- India, 4-51, 54
- Israel, 3-323, \*325
- Jordan, 3-339
- Mexico, 7-13, \*\*19
- Pakistan, 4-77, 79, \*85, 91
- Peru, 7-121
- Philippines, 5-313-14, \*319
- Russian Azerbaijan, 3-196
- Siberia, 3-155
- Spain, 1-332; 7-267
- Sudan, 5-128-29
- Syria, 3-289
- Tunisia, 5-45
- Is, City of, French legend, 1-281**
- Isabella, queen of Spain, 1-312**
- Iserlohn, town of Germany, festival at, 2-118**
- Isfahan, city, Iran, 3-205**
  - Shah's Mosque, 3-213
- Isiolo, village, Kenya, 5-162**
- Isis, Egyptian goddess, temple of, 5-74**
- Isker River, Bulgaria, basin of, 7-3328-3329**
- Islam, see Mohammedanism and Mohammedans**
- Islands, of Atlantic Ocean, 1-157-76**
  - of Mediterranean Sea, 1-369-83
  - off coast of Chile, 7-146
  - Pacific, 5-275-303
    - Borneo, 5-257-70
    - Indonesia, 5-225-56
    - New Guinea, 5-271-74
    - New Zealand, 5-358-74
    - Philippines, 5-275-303
    - Scotland, 1-117
- Islay, island near Scotland, 1-112**
- Isle of Man, 1-64**
- Isle of Wight, 1-38, 64**
- Isles of Scilly, 1-43**
- Ismail Pasha, Bridge, Cairo, Egypt, 5-129**
- Israel, state, 3-323-37**
  - map, 3-324
  - facts and figures, 3-335
- Istanbul (Constantinople), city, Turkey, 3-253, 263-85**
  - map, 3-266
  - See also Constantinople
- Istanbul University, 3-265**
- Italy, 2-295-334**
  - invasion of Greece, 3-8
  - maps, 2-298, \*356
  - Rome, 2-335-54
  - Sardinia, 1-372, \*376, \*377, 383
  - Sicily, 2-371-84
  - Tyrol, 2-228
  - Venice, 2-354-70; 7-334, 388, \*\*390, \*\*391
  - volcanoes, 7-334, 388, \*\*390, \*\*391
  - facts and figures, 2-334
  - See also Romans, ancient
- Iturbide, Augustin, ruler of Mexico, 7-11**
- Ivan the Terrible, tsar of Russia, 3-156**
- Iviza, Balearic Islands, 1-369**
- Ivory, 7-377**
  - carvings, Pakistan, 4-\*\*\*99
- Ivory Coast, French territory, Africa, 5-19, 29**
  - facts and figures, 5-32
- Izalco, Mount, Salvador, volcano, 7-33**
- Izmir (Smyrna), city, Turkey, 3-253**

## J

- Jabel Ram, Jordan, 3-339**
- Jackson, capital of Mississippi, 6-339, \*345**
- Jackson Lake, Wyoming, 6-392**
- Jacksonville, city of Florida, 6-338, \*345**
- Jai alai, Spanish game, 7-52**
- Jainism, Hindu sect**
  - temples at Kathiawar, 4-\*\*\*52
- Jaipur, India, elephant, 7-374**
  - temple, 4-32, \*51
- Jajce, Bosnia, cascades near, 7-\*\*\*350**
- Jakarta, capital of Indonesia, 5-225, 227, \*228, \*232, 236, \*237**
- Jama Masjid Mosque, India, 4-\*\*\*34, \*\*38, \*\*68**
- Jamaica, island of West Indies, 7-64, \*71, \*72, 75, 78**
  - facts and figures, 7-83
- James River, Virginia, 6-157**
- Jamestown, capital of St. Helena, 1-166**

## Japan, 4-333-64

- Ainus, people of, 7-242
- former influence in Pacific, 5-286
- Fujiyama, 4-\*\*\*335; 7-\*\*\*387
- hats, 7-292
- in Manchuria, 4-252, 257, 283, 285, 286
- in Mongolia, 4-315
- in World War II, 4-257
- influence in Siam, 4-212
- invasion of China, 4-257
- jinrikishas, 7-307
- map, 4-336
- occupation of Dutch East Indies, 5-256
- relations with China, 4-252, 257, 329, 332
- silk weaving, 7-363
- Tokyo, 4-365-72
- facts and figures, 4-364
- Japanese-Americans, in Hawaii, 6-309**
- Jasper, town, Alberta, 6-405**
- Jasper National Park, Alberta, 6-401-02, \*403, \*404, \*405**
- Jaunting car, Ireland, 1-148**
- Java, Indonesia, 5-225-32, 236-37, \*\*242, 245, \*250, \*255, 256; 7-\*\*\*280**
  - bamboo cart, 7-308
  - map, 5-224
  - volcanoes, 7-\*\*\*386
  - facts and figures, 5-256
- Jeanne d'Arc, see Joan of Arc**
- Jebel Aulia Dam, Sudan, 5-129**
- Jebel Jarmaq, Israel, 3-323**
- Jebel Musa, mountain, 7-\*\*\*336**
- Jenghiz Khan, Mongol emperor, 4-314**
  - in Turkestan, 3-163, 177
- Jeronimos, Monastery of the, Portugal, 1-348**
- Jerusalem, New City, Israel, 3-324, \*330**
  - Jews at ramparts, 3-\*\*\*337
- Jerusalem, Old City, Jordan, 3-323-24, \*343, \*\*344**
  - Moslems at Jaffa Gate, 3-\*\*\*341
- Jewels**
  - Ceylon, 4-180
  - emeralds, Bogotá, Colombia, 7-108
  - México, 7-15
  - See also Gems
- Jews, 7-336**
  - Algiers, 5-37
  - Egypt, 5-61, 94
  - Iraq, 3-232
  - Morocco, 5-8
  - wanderings in desert, 7-336
- Jezebel (Ezraealon), Israel, 3-323**
- Jhelum River, 4-105, \*109, \*111, \*113, \*115**
- Jibuti (Djibouti), seaport in French Somali-land, 5-27**
- Jidda (Jeddah), port of Arabia, 3-\*\*\*370**
- Jinrikishas, Ceylon, 4-177**
  - China, 4-320
  - Formosa, 4-245
  - Japan, 7-307
  - Madagascar, 5-218
- Jivaros, Ecuador Indians, blow-pipe, 7-114**
- Joan of Arc, 1-232, 279**
  - statue at Rouen, 1-277
- Jockey Club, Buenos Aires, 7-210**
- Johann II, prince of Liechtenstein, 2-279**
- Johannesburg, city, South Africa, 5-191, 195**
- Jokja (Djokjakarta), state in Java, 5-237**
- Jordan, Hashemite kingdom, 3-338-46**
  - map, 3-342
  - facts and figures, 3-346
- Jordan River, 3-\*\*\*333, 339**
- Jos Plateau, Nigeria, 5-142, 145**
- Josselin, Château of, Brittany, 1-\*\*\*275**
- Jotunheim Mountains, Norway, 2-10**
- Juan Fernandez Island, Chile, 7-146**
- Judaea, Israel, 3-323**
- Judo (Jujitsu), 4-349**
- Jugoslavia, see Yugoslavia**
- Jujitsu (Judo), 4-349**
- Juneau, capital, Alaska, 6-304, \*315, 316**
- Juniata River, Pennsylvania, 6-220**
- Junks, Chinese boats, 4-264**
- Jute**
  - Pakistan production, 4-77
- Jutes, conquest of England by, 1-21**
- Jutland, part of Denmark, 2-99, 102, \*104, \*105**

## K

- Kabul, capital of Afghanistan, 4-10, \*14**
- Kabyles, people of North Africa, 5-37, \*\*43**

# ALPHABETICAL INDEX

- Kafiristan**, Afghanistan, 4-\*\*17  
**Kafirs**, people of Afghanistan, 4-8, \*\*17  
**Kafue River**, South Africa, 5-169, 171  
**Kairawan (Kairouan)**, Tunisia, sacred Moslem city, 5-\*\*42, \*\*46, 53  
**Kalahari Desert**, South Africa, 5-195, 201; 7-335, 342  
**Kalevala**, epic of Finland, 2-58  
**Kalgan**, China, trade route to, 4-\*\*259  
**Kali**, Hindu goddess, temple, Calcutta, 4-\*\*72  
**Kalimantan**, part of Borneo in the Indonesian Republic, 5-266  
**Kalmucks**, Asiatic people, 4-\*\*290, \*297, \*300, 303  
**Kamakura**, Japan, 4-344, \*360  
**Kamchatka Peninsula**, U.S.S.R., 3-152  
**Kamikaze**, Japanese name for wind, 4-349  
**Kamjyun-ri**, village of Korea, 4-381  
**Kampala**, city, Uganda, 5-158  
**Kandahar**, Afghanistan, 4-\*\*12  
**Kandy**, Ceylon, 4-184  
     devil-dancer, 4-\*\*182  
     Temple of the Tooth, 4-\*\*173; 7-369  
**Kano**, city, Nigeria, 5-143, 145, \*146, \*149  
**Kansas**, state, 6-254, 255  
     cities, 6-359, \*360, 362  
     oil wells, 6-261  
     Wichita, aircraft factories, 6-254  
     facts and figures, 6-265  
**Kansas City**, Kansas, 6-359  
**Kansas City**, Missouri, 6-180, 254  
**Kapok mill**, Sumatra, 5-252  
**Kara Shah**, town of Sinkiang (Sin-Kiang), 4-291  
**Karachi**, capital, Pakistan, 4-70, \*76, 92  
     university, 4-92  
**Karafuto**, see Sakhalien Islands  
**Karaj**, Iranian hydroelectric project, 3-204  
**Karelians**, people of Finland, 2-53  
     in Russia, 3-129, \*\*134  
**Karlovo**, town in Bulgaria, 3-93  
**Karnak**, Egypt  
     avenue of sphinxes, 5-82, \*86, 87  
     temples, 5-60, \*64, \*\*73  
     temple ruins, 5-65  
**Karroo**, section of South Africa, 5-189, 195  
**Kashmir**, 4-73-74, 101-18  
**Katmandu**, capital, Nepal, 4-122, \*145  
**Katowice**, city of Poland, 2-161  
**Katsina**, town, Nigeria, 5-149  
**Kauai**, one of Hawaiian Islands, 6-312  
**Kava**, Pacific beverage, 5-283, \*\*299  
**Kavalli River**, Liberia, 5-135  
**Kayak**, Eskimo boat, 2-69; 7-269, \*278  
**Kayans**, tribe of Borneo, 5-268, 270  
**Kazakhstan**, Soviet republic in Asia, 3-173; 4-369  
     facts and figures, 3-180  
**Kazan Pass**, Rumania, 3-109  
**Keelung**, city, Formosa, 4-246  
**Kemano**, British Columbia, 6-113  
**Kennebec River**, Maine, 6-123  
**Kensington Gardens**, London, 1-74, 84  
**Kentucky**, state, 6-240  
     cities, 6-339, 346, \*347  
     facts and figures, 6-248  
**Kenya**, African territory, 5-151, 151-52, \*154, \*155, \*\*156, \*162  
     facts and figures, 5-172  
**Kenyahs**, tribe in Borneo, 5-259, 270  
**Keokuk Dam**, Iowa, 6-252  
**Kerbela**, Iraq, holy city, 3-230  
**Kerlescan**, Brittany, monuments, 7-261, \*\*263  
**Kerry**, County, Ireland, 1-139, \*\*142, \*148  
**Kew Gardens**, London, 1-118, 84  
**Khabarovsk**, city, Siberia, 3-155  
**Khafra**, king of Egypt, pyramid of, 5-87  
**Khartoum**, capital, Sudan, 5-128, 129  
**Khiva**, Turkestan, 3-177  
**Khmers**, ancient people of Cambodia, 4-222  
**Khorsabad**, Assyrian city, 3-221  
**Khufu (Cheops)**, king of Egypt  
     pyramid of, 5-60, \*85, 87, \*\*88, 89  
**Khyber Pass**, Pakistan, 4-75, 77  
**Kiangsi**, China, porcelain factory, 4-281  
**Kicking Horse River**, Canada, 7-326  
**Kicking Horse Trail**, Yoho National Park, Canada, 6-402-03  
**Kiev**, Russia, 3-138  
**Kikuyus**, African peoples, 5-152, \*\*156  
**Kill Devil Hill**, North Carolina, 6-188  
**Killarney Lakes**, Ireland, 1-148  
**Kimberley**, city of South Africa, 5-195  
**Kingsmere River**, Saskatchewan, 6-106  
**Kingston**, capital of Jamaica, 7-64, 75, 78  
**Kingston**, city, New York, 6-166  
**Kingston**, city, Ontario, 6-127  
**Kinta Valley**, Malaya, 4-187  
**Kipsigis**, African people, 5-154  
**Kirghiz**, Asiatic people, 3-168, 169, \*178  
**Kirghiz Soviet Socialist Republic**, 3-166  
     For Facts and Figures, see Statistical Summary, 3-180  
**Kitchens**, Mexico, 7-21  
**Kittatinny Mountains**, 6-218  
**Kitty Hawk**, North Carolina, 6-188  
**Kiukiang**, city of China, street, 4-267  
**Kjoelen Mountains**, Norway, 2-5  
**Klemantans**, Borneo tribe, 5-258  
**Klosters**, Grisons canton, Switzerland, 2-256  
**Knesset**, Israeli Parliament, 3-324  
**Knitted goods**, Norway, 2-14  
**Knokke**, resort, Belgium, 1-219  
**Knoxville**, city of Tennessee, 6-339  
**Koalas**, Australia, 5-322, 324  
**Kobe**, city, Japan, 4-245  
**Kodiak**, town of Alaska, 6-314  
**Kokanee Glacier Park**, British Columbia, 6-430  
**Kon-Tiki**, ocean-going raft, 7-272  
**Kongsberg**, town of Norway, 2-10  
**Konkomba**, tribe, Gold Coast, headdress, 7-286  
**Kootenay National Park**, British Columbia, 6-403-04, \*416  
**Koran**, Mohammedan scriptures, 3-361; 5-41, 94  
**Kordofan Province**, Sudan, 5-129  
**Korea**, 4-344, 348-49, 373-83  
     Chinese Communists in, 4-257  
     hats, 7-293  
     map, 4-274  
     truce agreement, 1953, 4-257, 383  
     Turkish troops in, 3-260  
     facts and figures, 4-383  
**Korean People's Republic**, 4-383  
**Kotokos**, people of Africa, 5-187  
**Krakatoa**, volcanic eruption on, 7-385  
**Krakow**, city of Poland, 2-157  
**Krasnovodsk**, port of Turkestan, 3-179  
**Krassin**, ice-breaker, 7-282  
**Kremlin**, fortress of Moscow, 3-148, \*\*153, \*\*160-161  
**Kronborg Castle**, Denmark, 2-97, \*99  
**Kuala Lumpur**, capital, Federation of Malaya, 4-194  
**Kublai Khan**, Mongol emperor, 2-357-58; 4-252, 317, 321, 373  
**Kuibyshev (Samara)**, city of Russia, 3-144  
**Kundelungu Mountain**, Belgian Congo, 5-175  
**Kundiman**, traditional Filipino song, 5-319  
**Kunming**, city of China, 4-268  
**Kuomintang**, Nationalist party, China, 4-252  
**Kupe**, Maori navigator, 5-375  
**Kuria Muria Islands**, Arabia, 3-383  
**Kuriles Islands**, U.S.S.R., 3-152  
**Kutahya**, town, Turkey, 3-258, \*261  
**Kuth Minar**, India, tower, 4-61  
**Kwan-yin**, Chinese goddess, 4-251  
**Kwangtung**, China, 4-288  
**Kyoto**, Japan  
     temple garden, 4-343  
     Yasaka pagoda, 4-358  
**Kyushu**, Japanese island, 4-348-49

## I

- Ia Calera**, Colombia, 7-108  
**Ia Ferrière**, Haiti, ruined fortress, 7-86  
**Ia Fuerza**, fort in Santo Domingo, 7-92  
**Ia Guaira**, port of Venezuela, 7-100  
**Ia Paz**, capital of Bolivia, 7-128-29  
**Ia Plata**, city, Argentina, 7-218  
**IaSalle**, French explorer, established Fort St. Louis, 6-271  
**Ia Serena**, city, Chile, 7-136  
**Ia Unión**, town of Salvador, 7-31  
**Iabor**, Siberia, U.S.S.R., 3-155, 162  
**Iabrador**, 6-45, \*61  
**Iace-making**  
     Belgium, 1-214, \*\*224  
     Czechoslovakia, 2-213  
     France, 1-233

# ALPHABETICAL INDEX

- Ladron Islands**, *see* Mariana Islands  
**Lafayette**, Ohio, old tavern, 6-\*\*\*262  
**Lagoons**, formation, 5-277  
**Lagos**, capital of Nigeria, 5-143  
**Lahore**, city, Pakistan, 4-\*\*\*80, 92  
**Laja River**, Chile, 7-345  
**Lakatois**, New Guinea boats, 5-274  
**Lake District**, England, 1-\*\*\*51  
**Lakes**  
 Chile, 7-138  
 England, 1-45, 48  
 Finland, 2-\*\*\*50  
 formation, 7-317  
 Mexico, 7-\*\*\*12  
 salt, 6-\*\*\*195; 7-337  
 Wales, 1-\*\*\*86  
*See also* names of lakes, as Superior. Lake  
**Lamaism**, form of Buddhism, 4-119-48, \*307, 314, 316  
**La Mancha**, Spain, harvest field, 1-\*\*\*33  
**Lamar River**, Yellowstone Park, fossil forests, 6-383  
**Lamas**, Mongolia, 4-316  
*See also* Lamaism  
**"Land of Emptiness"**, Jordan deserts, 3-339  
**Landeck**, village in Austria, 2-\*\*\*224  
**Land's End**, Manora Island, Pakistan, 4-\*\*\*77  
**Langeais Castle**, France, 1-\*\*\*237  
**Languages**, Australian aborigines, 5-356  
 China, 4-329, 332  
 Gaelic, Ireland, 1-136-37  
 Guarani, Paraguay, 7-180  
 India, 4-67  
 Italy, 2-322  
 Pakistan, 4-82, 84  
 Philippines, 5-318-19  
 Pidgin, 5-273-74  
 Spanish of Rio de la Plata area, 7-183  
 Turkey, 3-253  
 Welsh, 1-87, 90, 92  
**L'Anse-à-Beaufils**, Quebec hamlet, 6-\*\*\*77  
**Lanzarote**, one of Canary Islands, 1-\*\*\*171  
**Laot-tse**, founder of Taoism, 4-257  
**Laos**, Indochina, 4-229  
 map, 4-\*\*\*217  
**Lapland**, Finnish, 2-\*\*\*54, \*55  
 Swedish, 2-\*\*\*34, 35  
**Lapps**, people of northern Scandinavia, 2-35, \*45, 53, 57  
 Finland, 2-\*\*\*54, \*55  
 Norway, 2-\*\*\*20, \*45  
 Sweden, 2-\*\*\*46  
**Las Vegas**, city, Nevada, 6-\*\*\*289  
**Lassen Volcanic National Park**, California, 6-383, 388  
**Latin America**  
*See* Central America; South America  
**Latin Quarter**, Paris, 1-292  
**Latvia**, 2-173-90  
*For* Facts and Figures, *see* Statistical Summary, 2-190  
**Launsdorf**, Austria, castle near, 2-\*\*\*218  
**Laurentian Mountains**, Canada, 6-65  
**Laurentides**, The, provincial park, Quebec, 6-427  
**Lawrence, Col. T. E.**, in Arabia, 3-365  
**Le Havre**, port of France, 1-\*\*\*285  
**Lead industry**  
 Missouri, 6-260  
 Western United States, 6-292  
**League of Nations**, 2-276  
 helped Austria, 2-217  
**Leaning Tower**, Pisa, Italy, 2-\*\*\*332  
**Leather work**  
 shoes, Italy, 2-\*\*\*323  
 tanned rhea skin, Paraguay, 7-\*\*\*170  
**Lebanon**, Republic of, 3-305-22  
 facts and figures, 3-322  
**Lee, Robert E.**, memorial, 6-\*\*\*225  
**Lee Museum**, Gettysburg, 6-\*\*\*176  
**Lee River**, Ireland, 1-\*\*\*140  
**Leeward Islands**, of West Indies, 7-61, \*62, 75  
 facts and figures, 7-83  
**Legends**  
 of Australian aborigines, 5-356  
 Philippines, 5-314  
*See also* Myths  
**Leipzig**, city of Germany, 2-\*\*\*140  
 trade fairs at, 2-141  
**Lena River**, Siberia, 3-152, 155  
**Leningrad**, city of Russia, built by Peter the Great, 3-133, 147  
 Nevsky Prospect, 3-\*\*\*143  
**Leopold II**, king of the Belgians, African colonies, 5-181  
**Leopold III**, king of Belgium, 1-211, 214  
**Leopoldville**, capital, Belgian Congo, 5-\*\*\*178  
**Les Escaldes**, town of Andorra, 2-\*\*\*284  
**Lethbridge**, city, Alberta, 6-135-36, \*139  
**Letter-writer**, public, China, 4-\*\*\*322  
**Letts**, *see* Latvia  
**Leven, Loch** (west), Scotland, 1-\*\*\*98  
**Lewes**, town of England, 1-37  
**Lewes River**, Yukon Territory, 6-\*\*\*144  
**Lewis and Clark Expedition**, 6-171-72, 281  
**Lexington**, town, Massachusetts, 6-\*\*\*160, \*162  
**Leyte**, Philippine island, 5-305  
**Lhasa**, holy city of Tibet, 4-119, 120, 122, 137  
 palace of Dalai Lama, 4-\*\*\*127-\*\*\*129  
**Li'ao'yang**, China, walls of, 4-\*\*\*279  
**Liberia**, 5-131, 135  
 facts and figures, 5-140  
**Liberty Bell**, Philadelphia, Pa., 6-\*\*\*165  
**Libraries**  
 Parliamentary library, Ottawa, 6-\*\*\*130  
**Libya**, North Africa, 5-33, \*35, \*38, \*52, 53, 56  
 facts and figures, 5-56  
**Libya, Desert of**, 7-331, 335  
**Lido**, bathing beach, Venice, 2-355  
**Liechtenstein**, principality of, 2-279, \*282, \*288, \*289  
*For* Facts and Figures, *see* Statistical Summary, 2-294  
**Liepaja (Libau, or Libava)**, port of Latvia, 2-187  
**Life Guards**, English soldiers, 1-\*\*\*30  
**Liffey River**, Ireland, 1-\*\*\*136-37  
**Lighthouses**, 6-\*\*\*232  
 Scotland, 1-121  
**Lima**, capital of Peru, 7-119, 121, \*125  
**Limerick, County**, Ireland, 1-\*\*\*147  
**Lincoln**, capital of Nebraska, 6-362  
**Lincoln**, town of England, 1-\*\*\*47  
**Linen**  
 Manchuria, 4-\*\*\*284  
 preparing flax, Finland, 2-\*\*\*57  
 Rumania, 3-\*\*\*115  
*See also* Flax  
**Linz**, city of Austria, 2-228  
**Lions Gate Bridge**, British Columbia, 6-142  
**Liotaud, André F.**, French explorer, 7-228  
**Lisbon**, capital of Portugal, 1-\*\*\*348, \*350, \*351, \*353, 355, \*355  
**Lisse**, Netherlands, tulip field, 1-\*\*\*187  
**Litani River**, Asia Minor, 3-307  
**Lithuania**, 2-173-90  
*For* Facts and Figures, *see* Statistical Summary, 2-190  
**Little America**, Antarctica, 7-\*\*\*226, 228  
**Little Belt**, Danish strait, 2-98  
**Little Mermaid**, statue in Copenhagen, 2-\*\*\*97  
**Little Rock**, capital of Arkansas, 6-\*\*\*343, 348  
**Livestock**, *see* Cattle; Sheep; *also* Packing-house industry  
**Livingstone, David**, missionary and explorer in Africa, 5-169; 7-275, 346  
**Livingstone**, city, Northern Rhodesia, 5-169  
**Livonia**, medieval state, 2-173  
**Llamas**, animals, 7-\*\*\*311  
 in Andes Mountains, 7-\*\*\*132  
 cloth from hair, 7-\*\*\*130  
**Llandudno**, resort in Wales, 1-\*\*\*90  
**Llangollen**, town of Wales, 1-89  
**Loch Lomond**, Scotland, 1-101, \*118, \*120  
**Loess**, kind of earth in China, 4-273  
**Lofot River**, Belgian Congo, waterfall, 5-\*\*\*175  
**Lofoten Islands**, Norway, 2-19, \*22  
**Logging**, *see* Lumbering  
**Lohja**, Lake, Finland, 2-\*\*\*62  
**Lombardy poplars**, France, 1-\*\*\*243  
**Lombok**, island in Indonesia, 5-\*\*\*243, 245  
**London**, England, 1-\*\*\*18, 65-84  
 ancient survivals, 1-24-25  
 area and population, 1-64  
 New Scotland Yard, fingerprint files, 1-\*\*\*83  
 state processions, 1-20, 25  
 statue of Richard I, 1-\*\*\*14  
**London**, city, Ontario, 6-129-30  
**London Bridge**, 1-82  
**London Wall**, built by Romans, 1-65

# ALPHABETICAL INDEX

- Londonderry, town, Ireland, 1-155  
 Long, Stephen H., explorer, 6-172, 175  
 Long Island, New York, 6-205, 212  
 Longitudinal Valley, Chile, 7-136-37  
 Longwood, home of Napoleon on St. Helena, 1-167  
 Lookout Mountain, Tennessee, 6-227, \*339  
 Lopez, Carlos Antonio, Paraguayan dictator, 7-179  
 Lopez, Francisco Solano, Paraguayan dictator, 7-179  
 Los Angeles, California, 6-285, 290, 366, \*371, \*372, \*373  
 Los Molles, Chile, hydroelectric plant, 7-141  
 Lost Cities, Ceylon, 4-181  
 Loudeac, town of Brittany, France, 1-266  
 Louis IX (Saint), king of France, 1-232, 234  
 Louis XIV, king of France, 1-234, 302  
 palace at Versailles, 1-302  
 Louise, Lake, Banff National Park, Canada, 6-404, \*411  
 Louisiana, state, 6-175, \*234  
 cities, 6-346, \*346, \*347  
 For Facts and Figures, *see* Statistical Summary, 6-248  
 Louisiana Purchase, 6-169  
 Louisville, city of Kentucky, 6-339, 346, \*347  
 Lourdes Basilica, France, 1-257  
 Lourenço Marques, Portuguese Mozambique port, 5-171  
 Louth, County, Ireland, 1-130  
 L'Ouverture, Toussaint, Negro general in Haiti, 7-85  
 Louvre, museum of art, Paris, France, 1-292, 298, \*303  
 Low Countries, *see* Belgium; Netherlands  
 Lower Town, city of Quebec, 6-73  
 Lowlands, part of Scotland, 1-97, 100-01  
 Lucerne, city of Switzerland, 2-271  
 Lucerne, Lake, Switzerland, 2-266  
 Lumbering, Australia, 5-330  
 Brazil, 7-165  
 Burma, 4-150-51; 7-372  
 Canada, 6-36, 45, 47-48, \*56, \*69, 77, \*116  
 Ecuador, 7-113  
 Finland, 2-49, 58, \*62  
 Formosa, 4-240  
 Indochina, 4-228, 229  
 Nicaragua, 7-36  
 Paraguay, 7-177  
 Rumania, 3-107  
 Russia, 3-149  
 Sierra Leone, 5-142  
 Sweden, 2-39  
 United States, 6-194, 242-43, \*281, 292  
 use of elephants, 7-372, 375  
*See also* Forests  
 Luneta, park in Manila, 5-315  
 Luris, Persian tribe, 3-202  
 Lusaka, capital, Northern Rhodesia, 5-163  
 Luxembourg, Duchy of, 2-282, \*283, 291  
 facts and figures, 2-294  
 Luxembourg Musée and Gardens, Paris, 1-292  
 Luxor, town of Egypt, 5-60  
 temple at, 5-60  
 Luzon, Philippine island, 5-304, 305, 313-15, \*319  
 Lycabettus, Mount, Athens, 3-30, \*\*32-33, \*34  
 Lyons, city of France, 1-248, \*249, \*253  
 Lyse Fiord, Norway, 2-15
- M**
- Maan Elv, river in Norway, 2-116  
 Macao, Portuguese colony in China, 4-249, \*280, 288  
 Macassar, town of Celebes, 5-253  
 Macedonia, district of Greece, costumes, 3-24, \*\*25  
 Macedonia, Yugoslavia, 3-68  
 Machu Picchu, Peru, ruins, 7-117  
 Mackenzie, Alexander, Scotch explorer in Canada, 6-97, 145, 401  
 McKenzie, R. Tait, statue by, 6-164  
 Mackenzie Lowland, Canada, 6-147  
 Mackenzie River, Canada  
 Indians, 6-7, \*146, 147  
 Mackinac Island, Michigan, arch rock on, 6-258  
 McKinley, Mount, Alaska, 6-380
- Madagascar Island, 5-211-23  
 facts and figures, 5-223  
 Madeira Islands, in North Atlantic, 1-159-61, 163  
 scenes, 1-160, \*161  
 facts and figures, 1-176  
 Madeira River, South America, 7-154  
 Madison, capital of Wisconsin, 6-264, 357, \*360  
 Madrid, capital of Spain, 1-340, \*342, 343  
 Magadan, city, Siberia, 3-155  
 Magallanes Province, Chile, 7-138  
 Magdalena River, Colombia, 7-105  
 Magellan Strait, 7-144  
 Maggiore, Lake, Italy, 2-297  
 Magnitogorsk, city, U.S.S.R., 3-152  
 Magyars, Hungarian people, 2-236-52  
 Maharaja, Bhutan, 4-122  
 Mail service, pioneer period, U. S., 6-193-94  
 Maine, state, 6-204, 208, \*\*214  
 Acadia National Park, 6-380  
 cities, 6-323, \*323, \*324  
 facts and figures, 6-224  
 Maisonneuve, Sieur de (Paul de Chomedey), founder of Montreal, 6-124, \*126  
 Majorca, Balearic Islands, 1-369, \*\*371, \*382  
 Malacca, Manila residence, 5-315  
 Malacca, Malay Peninsula, 4-185-96  
 Malaga, city of Spain, 1-209, \*\*318, \*\*322  
 Malagasies, people of Madagascar, 5-214  
 Malaria  
 in Pacific, 5-284  
 Malay Archipelago, 5-224-56  
 Borneo, 5-257-70  
 map, 5-224  
 Malay tribes  
 Borneo, 5-257, 260  
 descendants in Madagascar, 5-211  
 Formosa, 4-233-48  
 Java, 5-226  
*See also* Malay Archipelago; Malaya  
 Malaya, 4-185-96  
 For Facts and Figures, *see* Statistical Summary, 4-196  
 Maldive Islands, 4-184  
 Maldonado, city, Uruguay, 7-189  
 Mail, Simla, India, 4-54  
 Malt, preparation of, Finland, 2-51  
 Malta, island in Mediterranean, 1-374, \*\*375, 376, 378, \*378  
 facts and figures, 1-383  
 Malta, Knights of, 1-375, 376, 378  
 Mamelukes, former ruling class in Egypt, 5-91, 126  
 Manama, capital of Bahrain Islands, 3-372  
 Manaus, river port, Brazil, 7-157  
 Manchester, city of England, 1-56  
 Manchukuo, *see* Manchuria  
 Manchuria, 4-252, 257, 283, 285-86  
 facts and figures, 4-288  
 Manchus, people in eastern Asia, 4-252, 283, 285, \*285, \*325  
 Mandalay, city of Burma, 4-149, 157  
 Mandayas, Philippine group, 5-311  
 Manhattan Island, N. Y., 6-156, \*317, 328  
 Manila, city, Philippines, 5-309, 314-15, \*317  
 Manioc, food  
 Pacific, 5-289  
 Manisa, province, Turkey, 3-261  
 Manitoba, province of Canada, 6-97-117  
 cities, 6-131, \*136, \*137  
 International Peace Garden, 6-428  
 parks, 6-416, 420, \*421, \*423  
 facts and figures, 6-120  
 Mankind, races of, 7-241-48  
 Manora Island, Pakistan, 4-77  
 Mansur, caliph, founder of Bagdad, 3-237  
 Manufactures, Finland, 2-58  
 Sweden, 2-35  
 Switzerland, 2-268  
 Turkey, 3-261  
 United States  
 Middle West, 6-251, \*254, 255  
 Northeastern States, 6-212  
 Southern States, 6-236, 242  
*See also* Industries  
 Manzanillo, city of Mexico, 7-17  
 Maoris, people of New Zealand, 5-375-84
- Maps**  
 Antarctica, 7-236  
 Argentina, 7-202  
 Brazil, 7-150



# ALPHABETICAL INDEX

## Maps (continued):

- Canada, 6-35
- Chile, 7-136
- England, 1-35
- Egypt, 5-92
- Indochina, 4-217
- Ireland, Republic of, 1-128
- Istanbul, Turkey, 3-266
- Italy, 2-298
- Japan, 4-336
- New Guinea, 5-272
- Northern Ireland, 1-35, \*128
- Pacific islands, 5-278
- Paraguay, 7-172
- Philippine Republic, 5-308
- Scotland, 1-35
- Sudan, 5-127
- Turkey, 3-248
- United States, 6-155, \*184
- Uruguay, 7-184
- Wales, 1-35
- Maps and mapping, 1-11-13**
- Mar del Plata**, resort, Argentina, 7-218, 219
- Maracaibo, Lake**, Venezuela, 7-99, \*103
- Marathas**, people of India, 4-224
- Marble**, Carrara, Italy, 2-325
- Greece, 3-8
- United States, 6-220, 236
- Margaree River**, Cape Breton Island, 6-62
- Margarita Island**, Venezuela, 7-102
- Maria Theresa**, queen of Austria, appeal to Hungarian nobles, 2-237
- Mariana Islands**, 5-285-86, \*295
- facts and figures, 5-301
- Marie Antoinette**, queen of France, prison of, 1-300
- Marienbad**, health resort of Czechoslovakia, 2-209
- Marken Island**, Netherlands, 1-190
- Market Cross**, Chichester, England, 1-36
- Markets**
  - Egypt, 5-90
  - French Sudan, 5-27
  - Hungary, 2-248
  - Iran, 3-212
  - Latvia, 2-176
  - Mexico City, 7-6
  - Morocco, 5-11
  - Nassau, Bahamas, 7-78
  - Nepal, 4-134
  - Netherlands, 1-209
  - Paraguay, 7-177
  - Portugal, 1-365
  - Sumatra, 5-241
  - Syria, 3-301, \*302
  - Turkey, 3-274
- Marko**, Prince, legendary hero of Bulgaria, 3-92, 96
- Maronites**, Catholic sect, Lebanon, 3-313, \*315
- Marra Mountains**, Sudan, 5-127
- Marrakech**, city of Morocco, 5-6-8, \*15
- Marriage**, see Wedding customs
- Marseilles**, city of France, 1-258
- Marshall**, Liberian seaport, 5-135
- Marshall Islands**, 5-285-86
- facts and figures, 5-301
- Marshall Plan**, aid to Germany, 2-113
- Martand**, temple ruins, India, 4-107, 113
- Martha's Vineyard**, Massachusetts, 6-173
- Martinique**, West Indies, 7-76, 385
- Marunouchi district**, Tokyo, 4-367
- Mary Queen of Scots**, castles of, Edinburgh, 1-106, \*107
- Maryland**, state, 6-202, 220-21
- clues, 6-335, 336
- facts and figures, 6-224
- Maryland, Republic of**, Liberia, 5-135
- Masai**, people of East Africa, 5-151, 158, \*\*160
- Masaryk, Thomas G.**, late president of Czechoslovakia, 2-194
- Masks**, Iroquois healing, 6-226
- Tibet, 4-138
- Massachusetts**, state, 6-159, \*160, \*162, \*173, 208
- cities, 6-154, \*161, \*206, \*\*223, \*318, 323, \*324, \*326
- facts and figures, 6-224
- Massacre of Seven Oaks**, Canada, 6-97
- Massasoit**, Indian chief, statue, 6-154
- Massey, Vincent**, governor general of Canada, 6-41
- Massive Range**, Alberta, 6-102
- Matabeleland**, Southern Rhodesia, 5-169
- Matabeles**, African tribe, 5-169, \*193, \*194, 195
- Matadi**, port of Belgian Congo, 5-181
- Matches**, industry in Eritrea, 5-136
- industry in Sweden, 2-35
- Mate**, South American tea, 7-171, \*192, 214
- Mato Grosso**, state, Brazil, 7-59
- Matterhorn**, peak in Alps, Switzerland, 2-255, 271, \*271
- Mau Mau**, Kenya secret society, 5-152
- Mauna Loa**, Hawaii, volcano, 6-312; 7-388, 392
- Mauritania**, French territory in Africa, 5-25, 32
- Mauritius Islands**. For Facts and Figures, see Statistical Summary, 5-210
- Mawson, Sir Douglas**, Antarctic explorations, 7-223-24
- Maximilian**, emperor of Mexico, 7-12
- Mayas**, Indians of Mexico, 7-8, \*\*26, 28, 264
- pyramids of, 5-89; 7-11
- sphinxes of, 5-87
- Mayo, County**, Ireland, 1-127, \*144, 155
- Mayon, Mount**, Philippine volcano, 5-313
- Mazagan**, town of Morocco, 5-14
- Mazama, Mount**, Oregon, extinct volcano, 6-331
- Meat-packing industry**, Canada, 6-118
- Middle West, 6-254-55
- Uruguay, 7-193
- Meath, County**, Ireland, 1-129
- Mecca**, holy city of Arabia, 3-365, \*\*374
- pilgrimages, 3-339
- Mechele (Malines)**, city, Belgium, 1-222
- Medicine men**, Australian aborigine, 5-355
- Medina**, city of Arabia, Mohammed buried at, 3-365
- Mediterranean Sea**, islands of, 1-369-83
- Medum**, Egypt, pyramid, 5-84
- Meerschau pipes**, 3-275
- Mehenkhetre**, Egyptian noble, tomb, 5-71; 7-276
- Meissen**, city of Germany, 2-143
- Meknes** (formerly Mequinez), city of Morocco, 5-15
- Mekong River**, Asia, 4-225; 7-320
- Melanesia**, Pacific island group, 5-281, 283-85
- Melanesians**, Pacific people, 5-284-85, \*287, \*\*302, \*303
- in New Guinea, 5-272
- Melrose Abbey**, Scotland, 1-114
- Melbourne**, city of Australia, 5-338, \*340, \*341, \*342
- Melk**, Austria, Benedictine abbey, 2-230
- Mendoza**, city, Argentina, 7-218
- Memel (Klaipeda)**, seaport on Baltic, 2-186
- Memnon**, Egyptian god, colossi, 5-77
- Memorials**, Canada, see Canada—historic sites
- Memphis**, ancient capital of Egypt, 5-61, \*\*81
- Memphis**, city of Tennessee, 6-339
- Menam River**, Siam, 4-202, 205, 209
- Menangkabus**, people of Sumatra, 5-245
- Mendoza**, city, Argentina, 7-218
- Mendoza Province**, Argentina, 7-201, 214
- Mengo**, town, Uganda, 5-158
- Menes**, ancient Egyptian ruler, 5-57
- Mennonites**, in Paraguay, 7-179
- Men's societies**, Melanesia, 5-284
- Merced River**, California, 6-379
- Mercedes**, city, Uruguay, 7-190
- Merchants**, street, Albania, 3-52
- Arabian water vendor, 3-373
- bird-sellers, Mexico, 7-14
- bread vendor, Jordan, 3-343
- coffee vendor, Syria, 3-295
- food vendor, Libya, 5-52
- Greek fruit-seller, 3-42
- ice-cream vendor, Bagdad, 3-243
- melon vendor, Samarkand, 3-179
- Mercury** (statue), Place de la Concorde, Paris, 1-294
- Meroe**, Ethiopia, pyramids, 5-89
- "Merrie"** England, meaning of term, 1-21
- Merrimac**, warship, 7-279
- Merv**, city of Turkestan, 3-163, 178
- Mesa Verde National Park**, Colorado, 6-383
- Mesopotamia (Iraq)**, ancient art, 7-253
- ancient trade routes in Syria, 3-287
- See also Iraq
- Mesurado River**, Liberia, 5-135
- Metallurgy**, factories, Czechoslovakia, 2-214
- Metals**, see Minerals

# ALPHABETICAL INDEX

- Meteora Monastery**, Thessaly, 3-\*\*\*13  
**Métis**, half-breeds of Canada, 6-100  
**Mexicans**, in United States, 6-290  
**Mexico**, 7-4-24  
 map, 7-6  
 pyramids, 5-89  
 volcanoes, 7-389, \*389  
 facts and figures, 7-24  
**Mexico City**, capital of Mexico, 7-5-6, \*8, 9  
**Mi A Ri**, village of Korea, 4-\*\*\*382  
**Miami**, city of Florida, 6-\*\*\*244  
**Michigan**, state, 6-\*\*\*251, \*\*258  
 cities, 6-\*\*\*320, \*352, 353, \*353, \*354  
 facts and figures, 6-265  
**Micronesia**, Pacific island group, 5-281, 285-87  
**Micronesians**, Pacific people, 5-286-88  
**Middle East**, costumes, 7-\*\*\*290  
**Middle West**, states of, 6-249-71  
 facts and figures, 6-265  
**Midnight sun**, 2-\*\*\*24  
**Migration**, of nomads in Sin-Kiang, 4-295  
**Milan**, city, Italy, 7-289  
 cathedral, 2-\*\*\*303  
**Piazza Fratelli Cairole**, 2-\*\*\*302  
**Milazzo**, town of Sicily, 2-\*\*\*379  
**Millet**, chief food of Manchus, 4-283  
**Milwaukee**, city of Wisconsin, 6-357, \*361  
**Minas**, Basin of, Canada, 6-\*\*\*58  
**Minas Gerais**, state, Brazil, 7-150, \*152, 163  
**Mindanao**, Philippine island, 5-305, \*\*311  
**Mindanao Deep**, Pacific Ocean, 5-305  
**Minerals**  
 Afghanistan, 4-7  
 Albania, 3-\*\*\*53  
 Arabia, 7-\*\*\*338  
 Argentina, 7-210  
 Australia, 5-331, \*332, 333, \*334, 339  
 Belgian Congo, 5-182, 185  
 Belgium, 1-218  
 Borneo, 5-266  
 Brazil, 7-150  
 Canada, 6-7-8, 34, 36, 82, 84, 92-93, 112  
 Atlantic Provinces, 6-45, 48  
 Manitoba, 6-\*\*\*117  
 Quebec, 6-77  
 Saskatchewan, 6-\*\*\*40, \*105, \*113  
 Yukon and Northwest Territories, 6-\*\*\*145, 146-47, \*147, 149, 150  
 Ceylon, 4-\*\*\*180  
 Chile, 7-133, 145, \*145  
 China, 4-273  
 Colombia, 7-107  
 Cuba, 7-43  
 Finland, 2-58  
 Formosa, 4-\*\*\*240  
 France, 1-262  
 Georgian Republic, 3-191  
 Germany, 2-\*\*\*119, 137-38, 141  
 Gold Coast, Africa, 5-147  
 Greece, 3-8  
 Guiana, 7-96  
 Iceland, 2-68  
 Italy, 2-\*\*\*325  
 Luxembourg, 2-291  
 Malaya, 4-\*\*\*187  
 Manchuria, 4-283, 286  
 Mexico, 7-14  
 New Guinea, 5-274  
 Nigeria, 5-145, \*147  
 Northern Rhodesia, 5-163, \*171  
 Norway, 2-10, 19  
 Pacific islands, 5-\*\*\*293  
 Pakistan, 4-80, 82  
 Perú, 7-119, 121, \*124  
 Philippines, 5-305  
 Siberia, 3-155  
 Sicily, 2-377, 378  
 Sierra Leone, 5-150  
 South Africa, 5-195, \*203  
 Southern Rhodesia, 5-169  
 Sweden, 2-35  
 Syria, 3-\*\*\*288  
 Tanganyika, 5-158  
 Tunisia, 7-332  
 Turkey, 3-254, 256, \*275  
 United States, 6-185  
 Middle West, 6-260  
 Northeastern States, 6-336  
 Southern States, 6-232, 236, 337, 338-39, 348  
 Western States, 6-290, 292, \*300, 363-64  
 Uruguay, 7-193  
**Minerals (continued)**:  
 Venezuela, 7-192  
 Wales, 1-\*\*\*90, \*95  
 West Indies, 7-49, 74  
**Mines**, see Minerals  
**Ming dynasty**, emperors of China, 4-234, 252  
**Minneapolis**, city of Minnesota, 6-357, \*358  
**Minnesota**, state  
 cities, 6-\*\*\*257, 357, \*357, \*358  
 facts and figures, 6-265  
**Minnesota, University of**, 6-\*\*\*358  
**Minnesota River**, 6-\*\*\*259  
**Minorca**, Balearic Islands, 1-369  
**Minstrel shows**, 6-184  
**Minuteman**, statue, 6-\*\*\*160  
**Mirín Lake**, Uruguay, 7-187  
**Mirror Lake**, New York, 6-\*\*\*216  
**Mirror Lake**, Washington, 6-\*\*\*297  
**Misiones**, Argentine territory, 7-214  
**Missionaries**, see Christianity  
**Mississippi**, state, 6-\*\*\*174, \*\*238  
 cities, 6-339, \*345  
 Ship Island light, 6-\*\*\*232  
 facts and figures, 6-248  
**Mississippi River**, 6-249, \*\*259, \*347, \*357;  
 7-270, 317  
 ferryboat, 6-\*\*\*175  
 Keokuk Dam, 6-\*\*\*252  
 river pilots and steamboats, 6-180-83  
**Mississippi Sound**, 6-\*\*\*238  
**Missouri**, state, 6-\*\*\*180, 254-55  
 cities, 6-\*\*\*358, 362  
 ferryboat, 6-\*\*\*266  
 facts and figures, 6-265  
**Missouri River**, 6-249, 273, \*284  
**Mitchell**, South Dakota, Corn Palace, 6-\*\*\*269  
**Mitla**, Mexico, ruins at, 7-9  
**Miyajima**, sacred island, Japan, 4-\*\*\*334  
 torii, 4-\*\*\*342  
**Mobile**, city of Alabama, 6-339, \*342  
**Moffat Tube**, Colorado, 6-288  
**Mogul rulers**, in India, 4-74  
**Mohammed**, religious prophet, 3-361  
 See also Mohammedanism; Mohammedans;  
 Mosques  
**Mohammedanism**, Arab religion, 3-313  
 Afghanistan, 4-7  
 Albania, 3-53  
 Algeria, 5-48  
 Bulgaria, 3-81, 83, \*89  
 costume, 3-51  
 dervishes, 3-161  
 Egypt, 5-91, 94, 98, 100-02, \*103, 105-26  
 Georgians accept, 3-190  
 India and Pakistan, 4-\*\*\*107  
 mosques, 4-\*\*\*26, \*\*34, \*\*61, \*\*68  
 Java, 5-236  
 Jordan, 3-\*\*\*341  
 Lebanon, 3-812  
 Liberia, 5-135  
 Mecca, holy city, 3-\*\*\*374  
 Morocco, 5-\*\*\*9, \*\*17  
 Sudan, 5-130  
 Sumatra, 5-245  
 teachings of, 3-361  
 Tunisia, 5-\*\*\*42, \*\*46, \*\*51  
 See also Mohammedans; Mosques  
**Mohammedans**, in China, 4-\*\*\*294  
 in India, 4-22, 40  
 in Israel, 3-324  
 in North Africa, 5-33  
 in Pakistan, 4-71, 73-75, 84, 96-97  
 in Syria, 3-291, 297  
 Turkistan, 3-\*\*\*170  
 weaving, 7-\*\*\*365  
 Yugoslavia, 3-\*\*\*65  
 See also Mohammedanism; Moors; Mosques  
**Mohenjo-Daro**, ancient city, ruins in Pakistan,  
 4-96  
**Mois**, people of Annam, see Indochina  
**Moldau River**, Czechoslovakia, 2-201  
**Moldavia**, district of Rumania, 3-105  
**Mölle**, Sweden, fishermen, 2-\*\*\*36  
**Molokans**, Russian sect in Georgian S.S.R.,  
 3-192  
**Moluccas**, Archipelago of, 5-256  
**Mombasa**, port, Kenya, 5-152  
**Monaco**, principality, 2-277, \*278, \*280, \*281  
 For Facts and Figures, see Statistical Sum-  
 mary, 2-294

# ALPHABETICAL INDEX

- Monastir (Bitolj)**, city in Yugoslavia, 3-77  
**Mongolia**, 4-303-16, \*313  
*See also* Mongolians  
**Mongolians**  
 attempts to invade Japan, 4-344, 348-49  
 empire of Kublai Khan, 2-357-59  
 in China, 4-252  
 in Turkestan, 3-169  
 invasion of Syria, 3-289  
 Kazakhs, 4-309  
**Monitor**, warship, 7-279  
**Monkeys**  
 Indonesia, 5-260  
**Monks**, Bulgaria, 3-\*\*90, \*\*99, \*\*103  
**Monmouthshire**, Great Britain, 1-85  
**Monongahela River**, 6-332  
**Monroe Palace**, Rio de Janeiro, 7-166  
**Monrovia**, capital, Liberia, 5-135, 139, 140  
**Monsoons**, India, 4-25  
 New Guinea, 5-271  
**Mont St. Michel**, France, 1-2286  
**Mont Tremblant Park**, provincial park, Quebec, 6-427  
**Montana**, state, 6-273-94, \*284, \*296  
 cities, 6-363, \*364  
 Glacier National Park, 6-376, 388, \*\*390  
 facts and figures, 6-294  
**Montaña**, Perú, 7-121, 125  
**Monte Alban**, Mexico, ruins at, 7-9  
**Monte Carlo**, 2-277, \*279  
**Montenegro**, part of Yugoslavia, 3-57-61, 80  
 map, 3-60  
**Montevideo**, capital, Uruguay, 7-183, \*185, 188-89, \*188, \*189, \*190, \*191, \*195, \*196  
**Montevideo Beach**, Uruguay, 7-197  
**Montezuma Castle**, cliff dwelling, Arizona, 6-382  
**Montgomery**, capital of Alabama, 6-339, \*343  
**Montignac**, France, prehistoric paintings, 7-253  
**Montmartre**, section of Paris, 1-294  
**Montmorency Falls**, Quebec, 6-678  
**Montreal**, city of Quebec, 6-68-69, 72, 76, 123-25, \*128, \*129  
 Château de Ramezay, 6-66  
**Montreal River**, Canada, log-jam, 6-686  
**Monts**, *Sieur de*, French explorer, 6-43  
**Moorea**, one of Society Islands, 5-276  
**Moors**, people of Morocco, 5-4-18  
 in Portugal, 1-345  
 in Spain, 1-309, 312, \*\*315, 332; 5-5  
*See also* Cordova; Granada; Seville  
*See also* Mohammedanism; Mohammedans  
**Moose Mountain Park**, Saskatchewan, 6-429  
**Moraine Lake**, Alberta, 6-1103  
**Moravia**, part of Czechoslovakia, 2-195, 201, \*206, \*207  
**Morgan, Sir Henry**, Caribbean pirate, 7-41, 53, 78  
**Mori**, early people of New Zealand, 5-379  
**Mormon Temple**, Utah, 6-367  
**Mormons**, in Utah, 6-285, 364, \*367  
 migrations to the West, 6-177, 179, \*181  
**Morocco**, 5-4-18; 7-264  
 For Facts and Figures, *see* Statistical Summary, 5-18  
**Morocco City**, *see* Marrakech  
**Morphy**, Carlos, a governor of Paraguay, 7-179  
**Morro Castle**, fortress in Puerto Rico, 7-81  
**Morro Castle**, Havana, 7-58  
**Moscow (Moskva)**, capital of Russia, 3-148, \*\*153, \*154, \*\*156, \*157, \*158, \*159  
**Moskva River**, at Moscow, Russia, 3-157, \*\*160-61  
**Moslem League**, Pakistan, 4-71, 73  
**Moslems**, *see* Mohammedans  
**Mosques**  
 Blue Mosque, Istanbul, 3-271  
 Bulgaria, 3-81, \*89  
 Egypt, 5-91, \*103, \*\*113, \*\*116, \*\*118, \*\*120, 126  
 India, 4-226, \*\*31, \*\*34, \*\*38, \*\*61, \*\*68, \*107  
 Iran, 3-208, \*213  
 Iraq, 3-219  
 Israel, 3-329  
 Jordan, 3-344  
 Mecca, 3-374  
 minarets, Cairo, 5-117  
 Syria, 3-286  
**Mosques (continued)**  
 Turkestan, 3-177  
 Turkey  
 Istanbul, 3-268  
 Yugoslavia, 3-65  
**Mosquitoes**, in Arctic regions, 2-80; 6-11  
**Mostar**, town of Yugoslavia, 3-63, \*\*66-67  
**Mosul**, city of Iraq, 3-221, \*226, 228, \*235  
**Motion pictures**  
 Formosa, 4-242  
 Japan, 4-368  
**Motor vessels**, 7-282  
**Motorcycle manufacture**, England, 1-45  
**Mount Cameroon**, Nigeria, 5-142  
**Mount Edith Cavell**, Jasper National Park, Canada, 6-402, \*404  
**Mount Kenya**, Kenya, 5-151-52  
**Mount Kilimanjaro**, Tanganyika, 5-158  
**Mount Logan**, Canada, 6-148  
**Mount Manitou Incline**, Colorado, 6-291  
**Mount of Olives**, Jordan, 3-343  
**Mount Rainier National Park**, Washington, 6-297, 388, \*393  
**Mount Revelstoke National Park**, British Columbia, 6-406, 410  
**Mount Robson Provincial Park**, British Columbia, 6-430  
**Mount Royal**, Montreal, 6-72, 123-24, \*128  
**Mount Rushmore**, South Dakota, 6-189  
**Mount Vernon**, Virginia, home of Washington, 6-187  
**Mountain sheep**, 6-402  
**Mountain States**, of United States, 6-272-304  
 facts and figures, 6-294  
**Mozambique (Portuguese East Africa)**, 5-163  
 facts and figures, 5-210  
**Mozart, Wolfgang Amadeus**, birthplace of, 2-228  
**Muchinga Mountains**, Africa, 5-163  
**Muir, John**, naturalist, 6-378  
**Mulberry Street**, New York City, 6-211  
**Mules**, Greece, 3-11  
**Multan**, city, Pakistan, 4-84  
**Multnomah Falls**, Oregon, 6-3302; 7-348  
**Mummers**, England, 1-28  
**Munich**, city of Germany, 2-136  
**Munising**, town, Michigan, 6-251  
**Munroe Tavern**, Lexington, Massachusetts, 6-162  
**Murcia**, province of Spain, 1-319, \*\*334  
**Murray River**, Australia, 5-325, 327, \*343  
**Muscat**, port of Arabia, 3-376  
**Muscle Shoals**, hydroelectric plant, 6-243  
**Museums**, Russia, 3-147  
**Musicians**  
 Armenia, 3-186  
 Czechoslovakia, 2-203  
 Finland, 2-53  
 French Somaliland, 5-26  
 French Sudan, 5-29  
 gipsy, 7-301  
 India, 4-106  
 Ireland, 1-144, 147, 151  
 lama, 4-127  
 Latvia, 2-176  
 Nigeria, ceremonial drummer, 5-148  
 Pakistan, 4-94  
 Philippines, 5-319  
 Rumania, 3-116  
 South Africa, 5-208  
 Spain, 1-330  
 Surinam, 7-97  
 Sweden, 2-40  
 Switzerland, 2-265  
 Trinidad, 7-74  
 Vienna, 2-228  
 Yugoslavia, 3-68  
**Muskogean**, American Indians, 6-21, 24  
**Muskoka District**, Ontario, 6-84  
**Muslims**, *see* Mohammedans  
**Mussuck**, goatskin boat, India, 7-269  
**Mussulmans**, *see* Mohammedans  
**Mustafa Kemal (Kemal Atatürk)**, founder of modern Turkey, 3-251, 253  
**Muzo**, Colombia, emerald mines, 7-108  
**Myths**  
 Ireland, 1-128-29, 155-56  
 of Australian aborigines, 5-356  
 of Pacific islanders, 5-285

# ALPHABETICAL INDEX

## N

- Nabeul**, town, Tunisia, 5-39  
**Nagasaki**, port, Japan, 4-337, 352  
**Nagorno-Karabakh Autonomous Region**, 3-194  
**Nahuel Huapi Lake**, Argentina, 7-215  
**Nairobi**, capital, Kenya, 5-152, \*155  
**Nairobi National Park**, Kenya, 5-152  
**Nakhichevan Autonomous Soviet Socialist Republic**, 3-194  
**Namur**, city, Belgium, 1-225  
   coal field, 1-206  
**Nanking**, city of China, 4-257  
**Nansen**, Fridtjof, Arctic explorer, 2-80; 7-269  
**Nantes**, France, 1-269  
**Nantucket Island**, Massachusetts, 6-159  
**Naples**, city, Italy, 2-3314, \*331  
**Naples Bay of**, 2-3311; 7-3390  
**Napoleon I**, emperor of France, 1-170, 192, 234, 236, 321, 369; 2-221  
   gave Venice to Austria, 2-357  
   St. Helena home, 1-167  
**Nara**, town, Japan, 4-360  
**Narenta River**, Yugoslavia, 3-558, \*566, \*567  
**Nargileh**, water pipe, 5-126  
**Narrows, the**, St. John's harbor, Newfoundland, 6-121  
**Narvik**, city of Norway, 2-19  
**Nashville**, capital of Tennessee, 6-339, \*339  
**Nassau**, capital, Bahama Islands, 7-78  
**Natal**, province of South Africa, 5-189, 195, \*202, 204-10  
**Natchez**, city, Mississippi, 6-174  
**National Parks, Monuments and Forests**, United States, 6-377-400  
   facts and figures, 6-400  
   *See also* under names of parks, as Yellowstone  
**National Parks and Reserves**, Canada, 6-38, \*106, \*107, 401-31; 7-326  
   facts and figures, 6-431  
   *See also* under names of parks, as, Banff  
**Nationalists**, of China  
   in Formosa, 4-248  
**Nauru**, Pacific island, 5-293  
   facts and figures, 5-301  
**Nautilus**, submarine, built by Robert Fulton, 7-282  
**Navahos**, American Indians, 6-118, \*119, \*20, \*22, \*28; 7-3359  
**Naval Academy**, United States, 6-202, \*335  
**Navigation**, by Pacific islanders, 5-296-97  
**Nazareth**, Israel, 3-328  
**Nazis**, in Germany, 2-151-52  
**Nea Arachova**, village of Greece, 3-23  
**Nebraska**, state, 6-255  
   cities, 6-361, 362  
   facts and figures, 6-265  
**Negev**, Israel, 3-323, \*325  
**Negrillos**, pygmies of the Congo, 5-185  
**Negritos**, 4-195; 7-242  
   in New Guinea, 5-272  
**Negroes**, 7-242  
   Brazil, 7-152, 154  
   Surinam, 7-97  
   United States, 6-243, 244  
   roustabout folk songs, 6-183  
   West Indies, 7-71, 74-76, 85, 89  
   *See also* Africa, Table of Contents, Volume V  
**Nejef**, Iraq, holy city, 3-232  
**Nemiskam National Park**, Alberta, 6-419, 422  
**Nemours**, town in France, 1-231  
**Nepal**, 4-119-48  
   facts and figures, 4-148  
**Nestorian Christians**, India, 4-40  
**Netherlands**, 1-177-202  
   overseas territories  
     and New Guinea, 5-273  
     Dutch Guiana, 7-95, 96, \*99, 104  
     West Indies, 7-61, \*63, \*75, \*79, 83, \*342  
   headress, 7-289  
   map, 1-181  
   settlements in Japan, 4-352  
   facts and figures, 1-202  
   *See also* East Indies  
**Nevada**, state, 6-273-94  
   cities, 6-194, 366, \*370  
   facts and figures, 6-294  
**Nevis**, Water of, Scotland, 1-116  
**Nevsky Prospect**, Leningrad, Russia, 3-143  
**New Bedford**, city of Massachusetts, 6-318  
**New Brunswick**, province of Canada, 6-46, \*53  
   cities, 6-122, \*124  
   national park, 6-401, 425  
   facts and figures, 6-64  
**New Caledonia**, Pacific island, 5-291  
   facts and figures, 5-301  
**New Delhi**, capital, India, 4-36  
**New England**, *see* United States—Northeastern States  
**New Forest**, English district, 1-38, 40  
**New Glasgow**, town of Prince Edward Island, 6-61  
**New Guinea**, 5-271-74  
   map, 5-272  
   facts and figures, 5-274  
**New Hampshire**, state, 6-208, \*217, \*219  
   cities, 6-323, \*325  
   facts and figures, 6-224  
**New Hebrides Islands**, Pacific Ocean  
   facts and figures, 5-301  
**New Jersey**, state, 6-209, 212-13, \*218  
   cities, 6-328, 332, 333  
   Princeton University, 6-221  
   Pulaski Skyway, 6-332  
   facts and figures, 6-224  
**New Mexico**, state, 6-273-94  
   Carlsbad Caverns, 6-392, \*396  
   cities, 6-363, 364, \*364  
   Indians, 6-25  
   rain dance of Indians, 6-283  
   Ship Rock Peak, 6-276  
   facts and figures, 6-294  
**New Orleans**, Louisiana, 6-175, \*234, 346, \*346, 348  
**New South Wales**, state of Australia, 5-333, \*336  
**New Westminster**, city, British Columbia, Canada, 6-142  
**New York**, city, 6-156, \*161, \*185, \*211, \*317, 326, 328, \*328, \*329; 7-239  
**New York**, state, 6-166, 185, 212  
   cities, 6-317, 326, 328, \*328, \*329, \*330  
   Lake Placid, 6-216  
   Long Island, 6-205  
   Mirror Lake, 6-216  
   Niagara Falls, 6-215  
   West Point, United States Military Academy, 6-213  
   facts and figures, 6-224  
   *See also* New York, city  
**New Zealand**, 5-358-74  
   Maoris, 5-375-84  
   map, 5-360  
   Pacific islands, 5-301  
   facts and figures, 5-374  
**Newcastle**, city of Australia, 5-333  
**Newcastle**, city of England, 1-46  
**Newfoundland**, province of Canada, 6-44-45, \*47, \*60, 121, \*122  
   provincial park, 6-431  
   facts and figures, 6-64  
**Newport**, city, Rhode Island, 6-203, \*327  
**Newspapers**  
   Formosa, 4-246  
   Greenland, 2-73  
   Korea, 4-378  
   Turkey, 3-279  
**Newton Tracey**, town in Devonshire, England, 1-32  
**Ngata**, Sir Apirana, Maori statesman, 5-380  
**Niagara Falls**, 6-215; 7-343, 345, 352  
   Horseshoe Falls, Canada, 6-39  
**Niagara Peninsula**, Canada, peach orchards, 6-95  
**Nicaragua**, republic of Central America, 7-34, 35, \*36  
   facts and figures, 7-42  
**Nichigeki Theater Building**, Tokyo, 4-370  
**Nicholar II**, tsar of Russia, 3-133, 137  
**Niemen River**, Lithuania, 2-183  
**Niger Colony**, French Africa, 5-32  
**Niger River**, Africa, 5-23, 141-42  
**Nigeria**, British Africa, 5-141-43, \*145, \*146, \*147, \*148, \*149, \*157  
   spinning, 7-364  
   facts and figures, 5-172  
**Nijni Novgorod**, *see* Gorki  
**Nikko**, town, Japan, 4-352, 356  
**Nile River**, 5-57, \*74, 88, 97, \*102, \*125, \*129  
   Blue Nile, 5-127-29

# ALPHABETICAL INDEX

- Nile River** (*continued*):  
boats, 5-108  
floods, 7-317  
houseboats, 5-114  
six cataracts, 5-127  
Valley of the Kings, 5-76  
White Nile, 5-127-29, 152  
**Nimrud**, Assyria, bricks from, 7-254, \*\*255  
**Nineveh**, city, Assyria, 3-217, 221; 7-252, 253, 256, \*\*258  
**Ningpo**, town of China, temple, 4-266  
**Nipigon, Lake**, Ontario, headwaters of St. Lawrence River, 6-81  
**Nitrates**  
Chile, 7-144  
**Noah**, biblical character, legend of, 3-181-82  
**Nord Fiord**, Norway, 2-9  
**Nordenskiöld, Nils A. E.**, Antarctic explorations, 7-226  
**Norfolk**, city of Virginia, 6-337  
**Norfolk Broads**, English district, 1-48  
**Norilsk**, city, Siberia, 3-155  
**Norman Wells**, town of Canada, 6-9  
**Normans**  
in Ireland, 1-133, 136-37  
**Normandy**, province of France, 1-267-89  
**Normans**, in England, 1-24  
**Norriand**, region of Sweden, 2-32, 35  
**Norsemen**, boats of, 7-270-71  
discovered Greenland, 2-80  
discovered Iceland, 2-67  
Russia, 3-129  
*See also* Vikings  
**North America**  
For list of articles, *see* Tables of Contents, Volumes VI, VII  
**North Atlantic Treaty Organization**, 2-108; 3-260  
**North Carolina**, state, 6-158, \*\*226, 246  
cities, 6-188, 337, \*338  
facts and figures, 6-248  
**North Central States**, 6-249-71  
cities, 6-350-62  
facts and figures, 6-265  
**North Dakota**, state  
cities, 6-362  
facts and figures, 6-265  
**North Island**, New Zealand, 5-361, \*362, \*366, \*371  
**North Pole**, regions and explorations, 6-5-16  
map, 6-6  
**North Rustico**, village, Prince Edward Island, 6-417  
**North Uist**, Hebrides island, 1-122  
**North Vietnam**, communist state, 4-232  
map, 4-217  
**North-West Company**, fur traders, Canada, 6-97, 145-46, 284  
**North-West Frontier Province**, Pakistan, 4-75, 77, 96-97, \*100  
**Northeastern states**, United States, 6-201-24  
cities, 6-323-36  
facts and figures, 6-224  
**Northern Ireland**, 1-19, 125-56  
maps, 1-35, \*128  
facts and figures, 1-156  
**Northern Rhodesia**, Africa, 5-163, 169, \*171  
houses, 5-170  
facts and figures, 5-172  
**Northern Territory**, Australia, 5-342  
**Northwest Coast Indians**, totem poles, 6-331  
**Notre Dame de Paris**, cathedral, Paris, 1-292  
**Nottinghamshire**, England, 1-550  
**Nouméa**, capital, New Caledonia, 5-291  
**Nova Scotia**, province of Canada, 6-44, 46, \*49, \*\*50, \*52  
**Nova Scotia** (*continued*):  
Halifax, 6-121, \*123  
national parks, 6-401, 423, 425, \*426, \*427, \*429  
facts and figures, 6-64  
**Novosibirsk**, city, Siberia, 3-155  
**Nuba Mountains**, Sudan, 5-127  
**Nubia**, *see* Sudan  
**Nubian Desert**, Sudan, 5-127  
**Nubas**, tribe in Sudan, 5-130  
**Nuremberg**, Germany, 2-132  
**Nuanu Falls**, Hawaiian precipice, 6-310  
**Nyasa, Lake**, Africa, 5-163  
**Nyasaland**, Africa, 5-163  
facts and figures, 5-172  
**O**  
**Oahu**, Hawaiian Island, 6-309, \*309  
Nuanu Falls, precipice, 6-310  
Waikiki Beach, 6-307  
**Oak Ridge**, town, Tennessee, 6-243  
**Oases**, in deserts, 7-332, 335, 337  
China, 4-294  
Turkistan, 3-172  
**Ob River**, Siberia, 3-152, 155  
**Oban**, port, Scotland, 1-123  
**Obeid, El**, *see* El Obeid  
**Oberammergau**, town of Germany, 2-129  
**O'Brien Mine**, Cross Lake, Ontario, 6-382  
**Observatory**, Peking, China, 4-321  
**O'Casey, Sean**, Irish playwright, 1-148  
**Ocean currents**  
Pacific, 5-278, 281  
**Ocean Island**, Pacific, 5-298  
**Oceania** (Pacific islands), 5-275-303  
map, 5-278  
New Guinea, 5-271-74  
facts and figures, 5-301  
**Oceanographical Museum**, Monaco, 2-281  
**Oceans**  
Mindanao Deep, 5-305  
**Ochrida (or Ohrid)**, Lake, Yugoslavia-Albania, 3-77  
**O'Connell Street**, Dublin, 1-128, \*132  
**Odense**, town of Denmark, 2-98, \*102  
**Odeum**, ancient theater at Athens, 3-32-33, 44  
**Oesterdal**, Norwegian valley, 2-8  
**O'Hara Lake**, Yoho National Park, Canada, 6-406  
**O'Higgins, Bernardo**, Chilean patriot, statue of, 7-147  
**Ohio**, state, 6-251, \*\*262, \*265, 349, \*350, \*351  
cities, 6-350, \*354, \*355  
facts and figures, 6-265  
**Ohio River**, 6-347  
**Oil**, Albania, 3-53  
Arabia, 7-338  
Burma, 4-161  
Canada, 6-101, 134-35, 149  
Chile, 7-138, \*146  
Colombia, 7-107  
Iranian (Persian) fields, 3-204  
Italy, 2-308  
Mexico, 7-12  
pipelines, Iran, 7-339  
pipelines across Lebanon, 3-315  
Rumania, 3-108  
Russian fields near Caspian Sea, 3-196  
Transcaucasia, 3-193  
Turkey, 3-256  
United States, California, 6-290  
Middle West, 6-260, \*261  
Southern states, 6-236, \*245, 348, \*348  
Venezuela, 7-96, 102, \*104  
West Indies, 7-79  
**Oil palms**, Liberia, 5-138  
**Okinawa Island**, 4-363  
**Oklahoma**, state, 6-236, \*245  
cities, 6-348, \*348  
Indians, 6-24  
facts and figures, 6-248  
**Oklahoma City**, capital of Oklahoma, 6-348, \*348  
**Olaf Trygvessen**, king of Norway  
statue in Trondheim, 2-18  
**Olavinlinna Castle**, Finland, 2-52  
**Old Delhi**, *see* Delhi  
**Old Man of the Mountain**, leader of Assassins, 3-297  
**Oliena**, village of Sardinia, 1-376



# ALPHABETICAL INDEX

- Olives**  
Italy, 2-305  
Spain, 1-338
- Omaha**, city of Nebraska, 6-361, 362
- Omaha Beach**, Normandy, France, 1-280
- Ombu**, Argentine tree, 7-202, 210
- Omdurman**, city, Sudan, 5-129
- Omegna**, town, Italy, 2-3301
- Ongiara Falls**, *see* Niagara Falls
- Ontario**, province of Canada, 6-81-96  
cities, 6-125, 127-31, \*130, \*131, \*132, \*133, \*134, \*135  
national parks, 6-422-23, \*422, \*424, \*425  
Parliament Buildings, 6-34  
provincial parks, 6-127-28  
facts and figures, 6-96
- Ontario, Lake**, 6-81, \*\*83, \*\*87; 7-343
- Opera House**, Sofia, 3-87
- Opera House**, Vienna, 2-234
- Oporto**, *see* Porto
- Orang-Kubus**, people of Sumatra, 5-245
- Orangutans**, Borneo, 5-266
- Orange Free State**, South Africa, 5-189
- Oranges**, Israel, 3-334  
Malaga, Spain, 1-3318
- Orchids**  
Philippines, 5-309, 312
- Oregon**, state, 6-199, 273-94  
cities, 6-368, 372, \*374  
Crater Lake, 6-3391  
lumbering, 6-281  
Multnomah Falls, 7-348  
facts and figures, 6-294
- "Oregon Country"**, rival claims to, 6-114, 284
- Orinoco River**, Venezuela, 7-99
- Orkneys**, islands near Scotland, 1-117
- Orléans**, Island of, Quebec  
rug-making, 6-76
- Ormond-Daytona beach**, Florida, 6-247
- Orontes River**, Asia Minor, 3-307
- Orta, Lake**, Italy, 2-3300
- Orthez**, town of France, 1-2246
- Osaka**, city, Japan, 4-348
- Osborn, Henry Fairfield**, explorations in Gobi Desert, 4-305
- Oslo**, capital of Norway, 2-5-7  
Folk Museum, 2-221  
Town Hall, 2-7
- "Oslo breakfast"**, 2-23
- Oslo Fjord**, Norway, 2-7-8
- Ossau, Vallée d'**, French Pyrenees, 1-2247
- Ostend**, port, Belgium, 1-211, \*\*213
- Ostrava**, Czechoslovakia, 2-214
- Ostriches**, farm, South Africa, 5-192
- Ottawa**, capital, Canada, 6-34, \*38, \*\*94, 125, 127, \*130, \*131
- Ottawa River**, Canada, 6-84, \*\*87, 125, \*131
- Ottoman Empire**, 3-247-49, 251
- Otzfaler Alps**, Austria-Italy, 2-224
- Oulu River**, Finland, boats shooting rapids, 2-53
- Ouro Preto**, town, Brazil, 7-152
- Outer Mongolia**, 4-311, 314-15
- Outriggers**, in Pacific boats, 5-295-96
- Ovambo tribesmen**, 5-198
- Owen Falls Dam**, Uganda, 5-152, 155, \*166
- Oxen**  
as draught animals, 7-307  
Ceylon, 4-169  
Formosa, 4-243  
India, 4-112  
Italy, 2-350  
Lebanon, 3-322  
Mexico, 7-13  
Portugal, 1-362  
Rumania, 3-107  
Spain, 1-320  
trotting, Ceylon, 4-176  
West Indies, 7-72  
*See also* Cattle
- Oxford University**, England, colleges of, 1-41
- Ozark Plateau**, Missouri, 6-2266
- P**
- Pacific islands**, 5-275-303  
map, 5-278  
facts and figures, 5-301  
*See also* Islands
- Pacific Ocean**  
Maori migrations, 5-375-76, 379  
peoples of, 7-243
- Pacific states**, United States, 6-273-303  
facts and figures, 6-294
- Padang**, capital of Sumatra, 5-245
- Padang**, Burma, women, 4-153, 164
- Paddle boats**, Mississippi River, 7-270
- Paderewski, Ignace Jan**, Polish musician and statesman, 2-154
- Padua**, city, Italy, 2-312
- Pagodas**, Burma, 4-154, \*158  
China, 4-254, 257, \*\*275  
Japan, 4-358
- Pahang**, district of Malaya, 4-191
- Paijanne, Lake**, Finland, 2-52
- Pakistan**, 4-70-100  
map, 4-22  
Punjab, 7-314  
facts and figures, 4-100
- Palace, Imperial**, Peking, China, 4-318, \*326, 332
- Palace, royal**, Amsterdam, Netherlands, 1-182
- Palace, royal**, Athens, Greece, 3-14
- Palace of emperors**, Tokyo, Japan, 4-371
- Palace of Shah**, Teheran, Iran, 3-209
- Palace of Tz'u-hsi**, near Peking, China, 4-325, 327
- Palais de Chaillot**, Paris, 1-298
- Palais de Justice**, Paris, 1-292, \*296
- Palais du Cinquantenaire**, Brussels, Belgium, 1-216-17
- Palatine Hill**, Rome, 2-345
- Palazzo Vecchio**, Florence, Italy, 2-3319
- Pale, The**, in Irish history, 1-137
- Palembang**, city of Sumatra, 5-233
- Palermo**, city of Sicily, 2-377, \*382  
harbor, 2-373
- Palestine**, *see* Israel, Jordan
- Palm trees**  
oil palms, Liberia, 5-138  
oil palms, Nigeria, 5-143  
*See also* Coconuts, Sago palms, etc.
- Palma**, capital of Majorca Island, 1-382
- Palmar**, town in Costa Rica, 7-40
- Palmyra**, ancient city of Asia, ruins of, 3-290
- Pamir Mountains**, Turkestan, 3-168, 179
- Pamir Plateau**, Asia, 3-178
- Pampas**, Argentina, 7-202, \*207, 210, 215
- Pampulia**, city, Brazil, 7-148
- Pan-American Highway**, *see* All American Highway
- Pan-American Union**, Washington, D. C., 6-191
- Panama, Isthmus of**, 7-28
- Panamá, Republic of**, 7-25, 28, \*37, \*38-39, 40-41  
piragua (boat), 7-266  
facts and figures, 7-42
- Panama Canal**, 7-41  
Gaillard cut, 7-37
- Panama City**, capital, Panama, 7-38, \*39, 41
- Panamá hats**, made in Ecuador, 7-111, \*112
- Papakura Geyser**, New Zealand, 5-382
- Papeete**, port, Tahiti, 5-279
- Paper industry**, Canada, 6-45, \*57, \*69  
Formosa, 4-238  
Lithuania, 2-183
- Papua**, New Guinea  
boats, 7-271  
*See also* New Guinea
- Papuans**, of New Guinea, 5-272
- Para**, state, Brazil, 7-155
- Paradise Glacier**, Mount Rainier National Park, 6-393
- Paradise Valley**, Banff National Park, 6-409
- Paraguay**, 7-170-82  
map, 7-172  
facts and figures, 7-182
- Paraguay River**, South America, 7-171, 180
- Paramaribo**, capital of Dutch Guiana, 7-96, \*99
- Parana**, state, Brazil, 7-149, 163
- Parana River**, South America, 7-171, \*\*208-09, 214
- Parícutin**, volcano, Mexico, 7-389, \*389
- Paris**, capital of France, 1-290-304
- Park Crescent**, London, 1-74
- Parks**  
Bois de Boulogne, Paris, 1-302  
Canada  
Dinosaur Park, Alberta, 6-135  
Evangeline Park, Nova Scotia, 6-49  
provincial, 6-84, \*142

# ALPHABETICAL INDEX

## Parks (continued):

- Stanley Park, Vancouver, 6-41, \*113, 136, \*143
- Yoho, British Columbia, 6-38, \*\*98, \*\*99, \*\*111
  - facts and figures, 6-432
- China, 4-327
- Hawaii National Park, 6-305, 312; 7-389
- Lake Temagami, Ontario, Canada, 6-84
- London, 1-84
- Manchuria, 4-284
- Tokyo, Japan, 4-368
- United States, 6-271, 376-400
  - Balboa Park, San Diego, California, 6-372
  - Capitol Park, Phoenix, Arizona, 6-369
  - Jackson Park, Chicago, 6-350
  - Memorial Park, Mobile, Alabama, 6-342
- See also National Parks
- Parliaments**
  - Canada, 6-34, 41
  - Great Britain, 1-20, \*\*79, \*\*81
  - Russian Duma, 3-133
- Parnu, Estonia, school, 2-179
- Parsis, religious group in India, 4-40
- Parthenon, temple to Athena, at Athens, 3-32-33, \*\*37, \*\*40, 41, \*43
- Partition, of India, 4-73, 75
- Pas, The, Manitoba, copper section, 6-112
- Pasadena, city of California, 6-294
- Pasta, Italian food, 2-326, 328
- Patagonia, Argentina, 7-214
- Patan, city of Nepal
  - market square, 4-134
- Pathans, people of Pakistan, 4-74, 97, \*\*98
- Paysandu, city, Uruguay, 7-190
- Peace Bridge, Frankfurt-on-Main, Germany, 2-114
- Peace Palace, The Hague, 1-183
- Peach orchards, Ontario, Canada, 6-95
- Peanuts**
  - Gambia, 5-150
  - Nigeria, 5-143
- Pearl fisheries**
  - Ceylon, 4-165-66
  - Venezuela, 7-102
- Pearl Harbor, Hawaii, 6-309
- Pearl Mosque, Delhi, India, 4-226, \*\*31
- Pearse, Patrick, Irish Republic hero, 1-140
- Peat**
  - Ireland, 1-150
- Peddler, early traveling salesman, 6-156
- Peelshire, Scotland, ploughing in, 1-111
- Peggy's Point and Cove, Nova Scotia, 6-55
- Peking (Peiping), China, 4-317-32, \*319
- Pelée, Mont, West Indies, 7-385, 388
- Pellegrino, Monte, Sicily, 2-373
- Pelota, Spanish game, 7-52
- Pemba Island, Africa, 5-158
- Pena Castle, Portugal, 1-350
- Penang Island, Malaya, 4-185, \*188, \*192
- Penck, Albrecht, Viennese geographer, 1-11
- Penguins, 1-174; 7-226, \*230, 231-32, 235
- Penha, suburb, Rio de Janeiro, Brazil, 7-164
- Penn, William, 6-213
- Pennsylvania, state, 6-163, \*171, \*172, \*176, 204, 213, \*\*218, 220-222
  - cities, \*164, \*165, \*332, 333, \*334, 336
  - facts and figures, 6-224
  - See also Philadelphia
- Pennsylvania Memorial, Gettysburg, 6-176
- Pennsylvania wagon, see Conestoga
- Peoria, city of Illinois, 6-353
- Pepper market, Tunisia, 5-39
- Percé Rock, Quebec, 6-68
- Percheron horses, 1-218
- Perfume, bazaars, Tunisia, 5-48
  - Bulgaria, 3-84
  - French industry, 1-252, 256
- Pericles, Age of, in Athens, 3-39, 41
- Perry, Matthew C., U. S. naval officer, 4-337, 360
- Persepolis, town of ancient Persia, 3-206; 7-256-57
- Persia, see Iran
- Persia, Gulf of, 3-201
- Pern, Republic of, 7-117-32, \*316
  - desert coastal strip, 7-340

## Pern, Republic of, (continued):

- llamas, 7-311
- facts and figures, 7-132
- Pescadores Islands**, 4-248
- Peshawar, town, Pakistan, 4-96, \*100
- Peter and Paul, Abbey of SS., Ireland, 1-129
- Peter the Great, built St. Petersburg, 3-129, 133, 147
- Petitgrain (bitter oranges), 7-171
- Petra, rock city of Arabia, 3-366, \*\*367, \*\*371
- Petroleum**, see Oil
- Petsamo, region in Finland, 2-63
- Pharaohs, kings of Egypt, 5-57-78
- Philadelphia, Pennsylvania, 6-164, \*165, \*\*186, 333, \*334, 336
- Philae, island in the Nile, Egypt, 5-74
- Philippine Deep, Pacific Ocean, 5-305
- Philippine mahogany, 5-309
- Philippine Republic, 5-304-21
  - Lake Taal, 7-338
  - map, 5-308
  - volcanoes, 7-338
  - weaving, 7-366
  - facts and figures, 5-321
- Phoenicians, ancient people of Asia Minor, 1-376; 3-305; 5-33
  - trade with Spain, 1-305
- Phoenix, capital of Arizona, 6-364, \*369
- Phosphate**
  - in Gafsa Desert, 7-332
  - Nauru, 5-293
- Piazza del Campidoglio, Rome, 2-351
- Piccadilly Circus, London, 1-75
- Pichincha, volcano in Ecuador, 7-109
- Pico de Bandeira, mountain, Brazil, 7-151
- Pidgin, Pacific language, 5-273-74
- Pied Piper, legend of, 3-125
- Pietermaritzburg, Natal, South Africa, 5-197
- Pigmies, in Africa, 5-185
- Pigs, industry, in United States, 6-249
  - Poland, 2-164
- Pike, Zebulon Montgomery, explorer, 6-172
- "Pilgrim Railway," 3-339
- Pilcomayo River, South America, 1-171
- Pilsen, city, Czechoslovakia, 2-214
- Pilsudski, Joseph, Polish dictator, 2-160, 163
- Pinar del Rio, province of Cuba, 7-44
- Pine trees, making tar from, Finland, 2-53
- Pineapple industry, Hawaii, 6-308, \*308
  - Malaya, 4-195
- Pines, Isle of, Cuba, 7-60
- Ping River, Thailand, 4-208
- Pir Panjal Mountains, India, 4-101
- Piraeus, port of Athens, Greece, 3-27, \*30
- Piragua, boat of Panama, 7-266
- Pirates, Barbary States, 5-5, 33
  - Borneo, 5-264
  - Central America, 7-41
  - China, 4-233-34
  - West Indies, 7-53, 61, 78
  - See also Bandits
- Pisa, city of Italy, 2-332
- Pitcairn Island Colony
  - facts and figures, 5-301
- Pitchblende, Belgian Congo, 5-182
- Pittsburgh, city of Pennsylvania, 6-332, \*333, 336
- Pittsburgh, University of, 6-333
- Pizarro, Francisco, conqueror of Perú, 7-117, 119
- Place Bellecour, Lyons, France, 1-249
- Place de Brouckère, Brussels, Belgium, 1-203
- Place de la Bastille, Paris, 1-299
- Place de la Concorde, Paris, 1-293, \*294, 302
- Placid, Lake, New York, 6-216
- Platano, tropical food plant, 7-106
- Platypuses, Australia, 5-324, \*325
- Plays**
  - Burma, 4-163
  - China, 4-263
  - Chinese Turkestan, 4-302
  - Siam, 4-207
- Plaza de Congreso, Buenos Aires, 7-204
- Plaza de España, Barcelona, Spain, 1-317
- Plaza Independencia, Montevideo, 7-185, 188-89
- Pliva River, Bosnia, 3-59, \*\*62; 7-350
- Ploesti, Rumania, oil field at, 3-108
- Plymouth, city, Massachusetts, 6-154
- Plymouth, port of England, 1-44
- Pnom Penh, capital of Cambodia, 4-225, 226

# ALPHABETICAL INDEX

- Po Basin**, Italy, 2-299, 305, 355  
**Pocahontas Post Office**, Alberta, Canada, 6-\*120  
**Pocomo Mountains**, Pennsylvania, 6-\*218  
**Poi**, Pacific food, 5-239  
**Point Pelee National Park**, Ontario, 6-422  
**Pola**, Yugoslavia, ancient amphitheater, 2-\*329  
**Poland**, 2-153-72  
invasion by Russia in 1939, 3-145  
map, 2-\*153  
facts and figures, 2-172  
**Polders**, reclaimed land, Netherlands, 1-180-81,  
\*184, \*192, \*199  
**Politics**  
Italy, 2-316  
**Polo**, Marco, travels of, 2-357-60; 4-\*256  
**Polo**, game, Egypt, 5-\*93  
**Polperro**, England, fishing boats, 1-\*26  
**Polynesia**, Pacific island group, 5-281-83,  
\*280, \*282  
**Polynesians**, Pacific people  
in New Guinea, 5-272  
Maoris, 5-375-84  
**Pompeii**, Italy, 7-390  
**Ponce de León**, conqueror, Puerto Rico, 7-79  
**Ponies**, Mongolia, 4-\*312  
**Pont du Gard**, near Nîmes, France, 1-\*262  
**Ponta Delgada**, port, Azores, 1-\*163  
**Ponte Vecchio**, "old bridge," Florence, Italy,  
2-\*320  
**Pontianak**, capital of West Borneo, 5-\*265  
**Pontic Mountains**, Turkey, 3-253  
**Pony Express**, pioneer mail service, 6-193-94  
**Pool of Immortality**, Amritsar, India, 4-\*69  
**Pope**, head of Roman Catholic Church, 2-335  
**Popocatepetl**, volcano, México, 7-\*18  
**Porcelain industry**  
China, 4-277, 281  
Germany, 2-\*141  
Irish Belleek, 1-151  
*See also Pottery*  
**Porcupine**, Ontario  
gold mines, 6-92-93  
**Pori**, city of Finland, 2-\*61  
**Porkkala**, port in Finland, 2-63  
**Port Arthur**, city in Ontario, 6-35, 96  
**Port Askaig**, village, Hebrides Islands, Scot-  
land, 1-\*112  
**Port-au-Prince**, capital of Haiti, 7-\*84, \*85,  
\*87, 88  
**Port Harcourt**, port, Nigeria, 5-143  
**Port Moresby**, town, New Guinea, 5-274  
**Port Royal**, town of Jamaica, 7-75, 78  
**Porteños**, people of Buenos Aires, 7-200, 217  
**Portland**, city of Maine, 6-323, \*324  
**Portland**, Oregon, 6-\*199, 372, \*374  
**Porto (Oporto)**, city of Portugal, 1-352, 355,  
359  
**Portofino**, town in Italy, 2-\*321  
**Portsmouth**, English naval base, 1-38  
**Portugal**, 1-345-68  
Azores, 1-\*163  
Brazil as colony, 7-149, 151-52, 154, 167, 169  
colonies and dependencies  
in Africa, 5-173, \*174, \*181, \*183, \*185,  
187-88  
in China, 4-\*280, 288  
islands in Atlantic Ocean, 1-157-61, 163,  
164, 167, 170-76  
Mozambique, 5-210  
discovery of Azores Islands, 1-157  
entrance into China, 4-249  
map, 1-\*346  
Morocco once under, 5-\*14  
facts and figures, 1-368  
**Potavina Plain**, Yugoslavia, 3-\*61  
**Postal service**, pioneer period, U. S., 6-193-94  
**Potal**, milestone, Sinkiang, 4-\*299  
**Potala Palace**, Tibet, 4-122, \*\*128, \*\*299  
**Potatoes**, Maine, 6-\*204  
**Potsdamer Platz**, section of Berlin, 2-\*146, 151  
**Pottery**  
ancient Peru, 7-\*125, \*\*126  
Brazil, 7-\*162  
Burma, 4-\*152  
England, 1-\*44  
France, 1-\*232  
Hungarian, 2-\*247  
India, 4-\*59  
Iran, 3-\*210  
Italy, 2-\*323  
Mexico, 7-\*21  
**Pottery (continued)**:  
Philippines, 5-\*321  
Turkey, 3-\*258  
*See also Porcelain industry*  
**Powell**, Major J. W., explored Grand Canyon,  
6-383  
**Poznan**, Poland, Town Hall, 2-\*166  
**Prado**, park, Montevideo, 7-189  
**Praga**, section of Warsaw, Poland, 2-\*168  
**Prague (Praha)**, capital of Czechoslovakia,  
2-\*191, 206-08, 211-13, \*215  
**Prairie Provinces**, Canada, 6-97-120  
cities, 6-131, 134-36, \*136, \*137, \*138, \*139,  
\*140  
**Prehistoric man**, theories about, 4-305  
**Prempeh**, ruler of Ashanti, 5-\*160  
**Pretoria**, city, South Africa, 5-\*196  
**Prince Albert National Park**, Saskatchewan,  
6-\*106, 412, \*415, 416, \*420  
**Prince Edward Island**, province, Canada, 6-46,  
\*60, \*61, \*63, 121-22, \*125, \*417  
facts and figures, 6-64  
**Prince Edward Island National Park**, 6-\*417,  
423, 425  
**Prince George Island Park**, Calgary, 6-\*140  
**Prince Rupert**, British Columbia, 6-114, 142  
**Princes Street**, Edinburgh, Scotland, 1-\*104-05,  
120  
**Princeton University**, 6-\*221  
**Principe Island**, 1-176  
**Prison camps**, Siberia, U.S.S.R., 3-155  
**Propylaea**, approach to citadel, Athens, 3-\*32-  
\*\*33, \*36  
**Provence**, France, 1-249, 256  
**Puget-Théniers**, town, 1-\*255  
**Providence**, capital of Rhode Island, 6-326,  
\*327  
**Providence Island**, Liberia, 5-135  
**Ptolemy III**, Arch of, Karnak, Egypt, 5-\*73  
**Pu Tu Island**, China, 4-\*251, \*254  
**Pueblo**, city of Colorado, 6-364  
**Pueblos**, American Indians, 6-\*282  
basket-work, 7-\*358  
pottery-making, 6-\*278  
**Puerto la Cruz**, port of Venezuela, 7-\*104  
**Puerto Montt**, city, Chile, 7-138  
**Puerto Rico**, island of West Indies, 7-78-79,  
\*80, \*81  
facts and figures, 7-83  
**Puget-Théniers**, town in Provence, France, 1-  
\*\*255  
**Pulaski Skyway**, New Jersey, 6-\*332  
**Pulp and paper industry**, Formosa, 4-\*238  
Lithuania, 2-\*183  
Newfoundland, 6-45, \*57  
Quebec, 6-\*69  
**Punans**, tribe of Borneo, 5-268, 270  
**Punjab**, India-Pakistan, 4-92; 7-\*314  
Multan, city, 4-\*84  
**Punta Arenas**, city, Chile, 7-138, \*144  
**Punta del Este**, beach resort, Uruguay, 7-187  
**Puntiagudo**, Mount, Chile, 7-\*135  
**Purple Gate**, Hué, Indochina, 4-\*223  
**Pygmies**, *see* Pigmies  
**Pyramid Lake**, Nevada, 6-\*293  
**Pyramids**, Egyptian, 5-79-90  
Mexico, 7-8, \*11  
tomb of Caius Cestius, Rome, 2-\*353  
**Pyrenees Mountains**, 1-\*247  
Andorra, 2-\*284, \*286, 288, 291, \*\*293; 7-\*304  
**Pyrrha and Deucalion**, legend of, 3-5

## Q

- Qanats**, irrigation canals, 3-339  
**Quai des Grands Augustins**, Paris, 1-\*296-97  
**Quarrying**, slate, Wales, 1-\*90  
*See also Marble*  
**Quebec**, city, Canada, 6-72-73, 76, 122-23, \*126,  
\*127  
Citadel, 6-\*36  
St. Louis Gate, 6-\*67  
Sous-le-Cap Street, 6-\*70  
**Quebec**, province of Canada, 6-\*36, \*37, 65-80  
cities, 6-122-25, \*126, \*127, \*128, \*129  
provincial parks, 6-427  
spinning, 7-\*356  
facts and figures, 6-80  
**Quebracho**, South American tree, 7-171-72, 182  
**Queen Charlotte Islands**, British Columbia,  
Canada, 6-112  
**Queen Elizabeth Highway**, Ontario, 6-\*85

# ALPHABETICAL INDEX

Queen's University, Belfast, 1-154  
Queensland, state of Australia, 5-330, \*337  
Queenstown, Ireland, *see* Cobh  
Quetico Provincial Park, Ontario, 6-428  
Quichuas, Indians of Bolivia, 7-129, \*\*130  
of Perú, 7-117, 118  
Quimper, town, Brittany, France, 1-270, \*276,  
\*\*278  
Quirinal Palace, Rome, 2-346  
Quito, capital of Ecuador, 6-160; 7-109, \*115  
Quran, *see* Koran

## R

Rabat, capital of French Morocco, 5-7  
Races of mankind, 7-241-48  
in New Guinea, 5-272  
Radium, Belgian Congo, 5-182  
Railroads  
Argentina, 7-203  
Australia, 5-340  
Bagdad Railway station, 3-240  
Canada, 6-100, 104, 108, 134, 135  
cable railway up Lookout Mountain, 6-339  
Central African Federation, 5-171  
Chile, 7-145  
Egypt, 5-97  
first U. S. transcontinental, 6-183  
freight yards, Winnipeg, Manitoba, 6-136  
Kenya, 5-152  
Lebanon, 3-308  
Mexico, 7-14  
New Zealand, 5-369  
Pakistan, 4-82  
Semmering Railway, Austria, 2-225  
Sierra Leone, 5-150  
Syria, 3-303  
Tanganyika, 5-158  
through Andes, Peru, 7-120  
through Swiss Alps, 2-271  
U.S.R., 3-152, 155  
United States, history, 6-182, \*183, 194, 199-  
200  
cog railroad in Rockies, 6-291  
Rainbow, clipper ship, 7-271-72  
Rainfall  
India, 4-22, 25  
New Guinea, 5-271  
Pakistan, 4-75, 77  
Uruguay, 7-187  
Rainier, Mount, Washington, 6-297, \*393  
Rainy River, Ontario, Canada, 6-85  
Rajamak, Finland, church, 2-64  
Rajputs, caste of India, 4-50  
Rakospalota, Hungary, church, 2-249  
Raleigh, capital of North Carolina, 6-338  
Ramadan, Muslim month of fasting, 3-246; 5-  
101-02  
Rameses II, king of Egypt, 3-311; 5-559, 61,  
78  
Ramezay, Château de, Montreal, 6-666  
Ramparts, Jasper National Park, Canada,  
6-403  
Ranavalona III, queen of Madagascar, 5-219  
Rangoon, city of Burma, 4-149, 151, 157, \*158,  
\*159, \*160, \*161  
Rapa-Nui Island, Chile, 7-146  
Rapid City, South Dakota, 6-362  
Reading, city, Pennsylvania, 6-171  
Recife, city, Brazil, 7-154  
Recreation, *see* Resorts; Sports  
Red Cross Society, formation of, 2-274  
Red River, Canada, 6-97, 100, 105  
Red Russia, *see* Ruthenia  
Red Square, center of political life in Moscow,  
3-148  
Reducciones, Jesuit missions in Paraguay, 7-  
174-75, 179  
Regent's Park Zoo, London, 1-77  
Regina, capital, Saskatchewan, 6-131, 134, \*138  
Reindeer, 7-310  
Canada, 6-150  
draught animals, 7-308  
herds kept by Lapps, 2-220  
Lapland, 2-46  
Russia, 3-146  
*See also* Caribou  
Religion  
Australian aborigines, 5-352, 355-56  
Belgium, 1-211, 228  
Bulgaria, 3-96, 97

## Religion (continued):

Burma, 4-162, \*163  
Canada, 6-33  
Central America, 7-28  
China, 4-251, \*\*254, \*\*255, 257, 265, 315  
Druidical ceremonies, 1-269-70  
Egypt, 5-91, 94  
Germany, 2-139, 143  
gipsies, 7-304  
Holy Week in Spain, 1-341, 343  
holy wells, Ireland, 1-139  
in Indian subcontinent, 4-22  
India, 4-40  
Ireland, 1-128-29, 133, 137  
Israel, 3-324, 326  
Korea, 4-376, 379-81  
Lamaism, form of Buddhism, 4-119-48  
Lebanon, 3-312-13  
mixture of Christian and Moslem, Albania,  
3-53  
Syria, 3-297  
New Guinea, 5-274  
Pacific islands, 5-297, 300  
pagan rites, Syria, 3-297  
Pakistan, 4-71, 73-74  
Philippines, 5-316, 318  
Russia, 3-145, 147  
Scotland, 1-101  
Uganda, 5-167  
Voodoo, 7-89  
wayside cross, Switzerland, 2-269  
*See also* Cathedrals; Festivals, religious;  
Mosques; Religious customs; *also* names  
of religions, as Christianity  
Religious customs  
Dahomey, 5-29  
Tibet, 4-119-20  
Turkey, 3-263  
Religious festivals  
India, 4-23, 40, 42, 62, 66  
Remarkable Mountains, New Zealand, 5-368  
Reno, city of Nevada, 6-370  
Republic of Ireland, *see* Ireland, Republic of  
Republic of Korea, 4-383  
Reservations, Indian, 6-32  
Resorts, Ontario, Canada, 6-883  
Yugoslavia, 3-121  
Restigouche River, Canada, 6-51  
Reval (Tallinn), city of Esthonia, 2-174, 184  
Reykjavik, capital of Iceland, 2-68, \*77, \*82, \*83  
Rheinstein Castle, Germany, 2-124  
Rhine River, 2-124, \*\*130, \*288; 7-320, 345  
Rhode Island, state, 6-208  
cities, 6-326, \*327  
facts and figures, 6-224  
Rhodes, Cecil, South Africa pioneer, 5-201  
Rhodes, Island of, 3-22  
Rhodesia, *see* Northern Rhodesia and Southern  
Rhodesia  
Rhodope Mountains, Bulgaria, 3-82, 92, \*\*102  
Rhonda, Spain, *see* Ronda  
Rhône River, Gorges du Triente, 7-322  
Rhumel River, Algeria, 7-327  
Rialto Bridge, Venice, 2-355  
Ribe, town of Denmark, 2-104  
Rice, Bali, East Indies, 5-239  
Ceylon, 4-166, \*\*170  
China, 4-281  
Formosa, 4-239, \*241  
India, 4-42, \*43  
Italy, 2-305  
Japan, 4-333, 344  
Java, 5-231, 232, \*232, \*\*242  
Korea, 4-376  
Madagascar, 5-217  
Pakistan, 4-88  
Philippines, 5-305, 313-14, \*319  
Sumatra, 5-253  
Richard I, king of England, statue in London,  
1-14  
Richmond, capital of Virginia, 6-319, 337  
Rickshas, *see* Jinrikishas  
Ridgefield, town of Connecticut, 6-207  
Riding Mountain National Park, Manitoba, 6-  
416, 420, \*421, \*423  
Riel's Rebellion, Canada, 6-100  
Rifs, people of Morocco, 5-15  
Riga, capital of Latvia, 2-177, 184, 187  
Rila Monastery, Bulgaria, 3-99, \*\*103  
Rio de Janeiro, capital, Brazil, 7-149, 151,  
\*\*160-61, \*166

# ALPHABETICAL INDEX

- Rio de Janeiro, Bay of, Brazil, 7-171**  
**Rio de la Plata, South America, 7-187, \*197**  
**Rio Negro, Uruguay, 7-187**  
**Riva, town, Italy, 2-310**  
**Rivera, Primo de, dictator of Spain, 1-321**  
**Rivers**  
 river pilots, 6-180-83  
 work of, 7-317-30  
*See also names of rivers*  
**Riviera, French, 1-249, 256; 2-277**  
**Riveria, Italian, 2-318**  
**Riza Khan, former shah of Persia, 3-216**  
**Rizal, Jose, Philippine hero, 5-309**  
**Rjukan, town of Norway, 2-11, 14**  
**Roads**  
 Alaska Highway, 6-149, 314  
 All American Highway, 7-38, \*136  
 Appian Way, Italy, 2-352  
 Bridport Road, England, 1-36  
 Canada, 6-85, \*405  
 colonial highways, United States, 6-156, 159  
 France, 1-243  
 in the Caucasus, 3-193  
 India, 4-42  
 Lebanon, 3-312  
 Mexico, 7-7, \*13, 14-15  
 New Zealand, 5-369  
 Pulaski Skyway, New Jersey, 6-332  
 Siberia, 3-155  
 United States, 6-322  
 Uruguay, 7-196  
 Wilderness Road, United States, 6-170  
**Roanoke Island, North Carolina, 6-158**  
**Robertsport, Liberian seaport, 5-135**  
**Robson, Mount, Canadian Rockies, 6-112, 402**  
**Rockefeller Center, New York City, 6-328, \*329**  
**Rockmex, hybrid Mexican corn, 7-13**  
**Rocks, action of rivers upon, 7-317-30**  
 volcanic, 7-384-92  
**Rocky Mountains, Canada, 6-112**  
 United States, 6-273-304  
**Roda Island, Egypt, 5-108**  
**Rodney Memorial, Spanish Town, Jamaica, 7-71**  
**Rodo Park, Montevideo, 7-189, \*190**  
**Rollmops, manufacture of, Germany, 2-142**  
**Romanov dynasty, Russia, 3-137**  
**Romans, ancient**  
 and Ireland, 1-128  
 and Scotland, 1-104  
 bridge over River Jordan, 3-333  
 conquest of Gaul (France), 1-230-31  
 conquest of Syria, 3-288-89  
 Hadrian's Wall, England, 1-46, \*46  
 historical sketch, 2-335  
 in England, 1-21, 65  
 in Lebanon, 3-305  
 in North Africa, 5-33, 53  
 in Rumania, 3-105  
 in Spain, 1-305  
 in Wales, 1-87  
 Pont du Gard (aqueduct), France, 1-262  
 rock temple at Petra, Arabia, 3-371  
 ruins at Rome, 2-337, \*341, \*345, \*347, \*349, \*352, \*353  
 ruins at Taormina, Sicily, 2-383; 7-391  
**Romany, gipsy and gipsy language, 7-300-01**  
**Rome, Italy, 2-335-53**  
**Romney Marsh, haunt of smugglers, England, 1-33**  
**Ronda, city of Spain, 1-306**  
**Rondeau Provincial Park, Ontario, 6-428**  
**Rondebosch, South Africa, official residence, 5-196**  
**"Roof of the World," Pamir Mountains, Asia, 3-168, 179; 4-130**  
**Roosevelt Highway, California, 6-322**  
**Roraima, Mount, South America, 7-95**  
**Rosario, city, Argentina, 7-217-18**  
**Rose garden, Bulgaria, 3-84**  
**Roses, making perfume from, Bulgaria, 3-85**  
**Ross, James Clark, Antarctic explorations, 7-223**  
**Ross Sea, Antarctica, 7-223**  
**Rotorua-Taupo, thermal region, New Zealand, 5-362**  
**Rothenburg, town in Bavaria, 2-122**  
**Rotos, city people, Chile, 7-137**  
**Rotterdam, city, Netherlands, 1-189, 199**  
**Rouen, city of France, 1-267, \*277, \*279**  
**Roumelia, name of Bulgaria under Turkish rule, 3-83**  
**Round Tower, Newport, Rhode Island, 6-203**  
**Royal Canadian Mint, Ottawa, 6-131**  
**Royal Canadian Mounted Police, 6-104-05**  
**Royal Gorge, Arkansas River, 7-330**  
**Ruanda Urundi, African territory, 5-177, \*179, 188**  
**Ruapehu, Mount, New Zealand, 5-371**  
**Rubber**  
 Brazil, 7-149, \*155  
 Ceylon, 4-181  
 Honduras, 7-32  
 Liberia, 5-140  
 Malaya, 4-189, 191, \*193  
 Peru, 7-125  
 Sumatra, 5-230, 252  
 Venezuela, 7-102  
**Rubber, synthetic**  
 Canada, 6-89  
**Rucar, village in Rumania, 3-110**  
**Rudolf, Lake, Kenya, 5-152**  
**Rufisque, district in Senegal, 5-30**  
**Rugs, Pakistan, 4-86**  
**Ruhr Valley, Germany, 2-118, \*119**  
**Rumania, 3-105-27**  
 map, 3-106  
 facts and figures, 3-125  
**Rumeli Hisari (Castle of Europe), Turkey, 3-272-73**  
**Rumengol, Pardon of, religious festival in France, 1-270, 276**  
**Russia, 3-128-62**  
 Caucasian republics, 3-181-98  
 conquest of Armenia, 3-184  
 control of Baltic States, 2-173  
 in World War II, 2-63  
 invasion of Finland in 1939, 2-63  
 Lithuania, 2-173  
 Outer Mongolia, 4-314-15  
 partition of Poland, 2-160, 172  
 relations with Yugoslavia, 3-80  
 spinning in Estonia, 7-354  
 struggles with Sweden over Finland, 2-49  
 tundras of Siberia, 7-337  
 Turkestan republics, 3-163-80  
 facts and figures, 3-162  
**Russia, Red, see Ruthenia**  
**Russian Turkestan, 3-163-80**  
**Ruthenia, U.S.S.R., 2-201, 216**  
**Ruwenzori Mountains, Uganda, 5-152, 155**  
**Rye, town of England, 1-33**  
**Ryukyu Islands, 4-363**  

**S**

**Saare Island, Russia, spinning, 7-354**  
**Sabaeans, Arab community, 3-234**  
**Sabaluka Cataract, Nile River, 5-127**  
**Sacajawea, Indian guide, 6-171-72, \*199**  
**Sacramento, California, 6-196, 368**  
**Sadhu, holy man, India, 4-33**  
**Sago palms, 5-290**  
**Saguenay River, Quebec, 6-779**  
**Sahara Desert**  
 Africa, 5-220; 7-335  
 oases, 5-221, \*24, \*36, \*47, 48  
 reclamation projects, 5-22  
 sand dunes, 7-333  
**Saigon, capital, South Vietnam, 4-218, \*221, 228, \*231**  
**St. Alexander Nevski Cathedral, Sofia, 3-81, \*86**  
**St. Andrews University, Scotland, 1-121**  
**St. Augustine, city of Florida, 6-338, \*344**  
**St. Basil (Vasili the Beatiſied), cathedral, Moscow, 3-156**  
**St. Bernard, dog, Switzerland, 2-260**  
**St. Croix, West Indies, 7-63, 74**  
**St. George, town, Bermuda Islands, 1-169**  
**St. George Chapel, Sofia, 3-81**  
**Saint-Gervais, church, Paris, 1-299**  
**St. Goarshausen, village in Germany, 2-130**  
**St. Helena, island, 1-165, \*166, \*167, 170, 176**  
**St. Kripsime Church, Armenia, 3-190**  
**Saint Jean de Luz, French resort, 1-264**  
**Saint John, New Brunswick, Canada, 6-46, \*53, 122, \*124**  
**St. John, island of West Indies, 7-74**  
**St. John River, Canada, 6-46**  
**St. John's, capital, Newfoundland, 6-121, \*122**  
**St. Joseph's Oratory, Montreal, 6-128**



# ALPHABETICAL INDEX

- St. Lawrence Gate**, Drogheda, Ireland, 1-130  
**St. Lawrence Islands National Park**, Ontario, 6-423, \*424, \*425  
**St. Lawrence Plain**, Canada, 6-36  
**St. Lawrence River**, 6-44, 65, \*128  
**St. Louis**, Missouri, 6-255, \*358, 362  
**St. Louis Gate**, Quebec, Canada, 6-67  
**St. Malo**, town in Brittany, 1-288-89  
**St. Maria del Fiore**, cathedral, Florence, 2-333  
**St. Maria della Salute**, church, Venice, 2-363, \*363  
**St. Mark's Cathedral**, Venice, 2-366-67, \*367, \*369  
**St. Mark's Square**, Venice, 2-359, \*369  
**Clock Tower**, 2-354  
**St. Martin's Church**, London, 1-70  
**St. Mary of the Victory Monastery**, Portugal, 1-349  
**St. Mary's Island**, Gambia, 5-150  
**St. Mary's River**, Canada and United States, 6-81, 85, \*91, \*253  
**St. Michel d'Aiguille**, church in southern France, 1-251  
**St. Patrick**, patron of Ireland, 1-128, \*150  
**St. Patrick's Purgatory**, shrine, Ireland, 1-155  
**St. Paul**, capital of Minnesota, 6-357, \*357  
**St. Paul River**, Liberia, 5-135  
**St. Paul's Cathedral**, London, 1-67, 73  
**St. Peter's Basilica**, Rome, 2-339, 351  
**St. Pierre**, city of Martinique, ruins of, 7-385  
**St. Restitut**, town of France, 1-260  
**"St. Sophia"**, Istanbul, *see* Hagia Sophia  
**St. Stefan's Cathedral**, Zagreb, 3-75  
**St. Thomas**, Virgin Islands, 7-67  
**St. Thomas Island**, *see* São Thomé  
**St. Vincent**, island of West Indies, 7-74  
**Sainte-Marie**, island near Africa, 5-223  
**Saipan**, Pacific island, 5-286  
**Sakais**, people of Malaya, 4-195  
**Sakhalin Island**, U.S.S.R., 3-152, 155  
**Sakkara**, Egypt, pyramid, 5-87  
**Salem**, capital of Oregon, 6-374  
**Salerno**, Italy, fisherman, 2-304  
**Salisbury**, capital, Southern Rhodesia and Central African Federation, 5-169  
**Salmon fisheries**, Alaska, 6-315  
**British Columbia**, 6-119  
**Northwest United States**, 6-301  
**Salonika**, Greek port, 3-7  
**Salt**, Pakistan, 4-97  
**Syria**, 3-238  
**Salt flats**, Utah, 6-195  
**Salt Lake City**, capital of Utah, 6-364, \*367  
**Salto**, city, Uruguay, 7-190  
**Salvador**, *see* El Salvador  
**Salvador**, city, Brazil, 7-148, \*\*168  
**Salween River**, Asia, course of, 7-320  
**Salzburg**, town of Austria, 2-226, \*228, \*\*231, \*232  
**Sam, Guillaume**, Haitian president, 7-86  
**Samarkand**, city of Turkestan, 3-163, \*\*164, \*176, 178, \*179  
**Samarra**, Iraq, mosque, 3-219  
**Samoa**, Pacific islands, 5-283, \*285; 7-265, \*\*295  
**facts and figures**, 5-301  
**Samory**, Sultan, African slave-raider, 5-23  
**Samoyedes**, Siberian nomads, 3-129  
**Sampaguita**, Philippine flower, 5-309  
**Sampans**, Chinese boats, 4-269  
**San Antonio**, Texas, 6-197, 349, \*349  
**San Bernardino**, town, Paraguay, 7-182  
**San Carlos**, Spanish mission, California, 6-281  
**San Cristobal Castle**, fortress in Puerto Rico, 7-80  
**San Diego**, city of California, 6-366, \*372  
**San Francisco**, California, 6-285, 288, 366, 368, \*373  
**United Nations conference**, 7-237  
**San Giorgio Maggiore**, church, Venice, 2-370  
**San Giulio**, island, Lake Orto, Italy, 2-300  
**San José**, capital of Costa Rica, 7-40  
**San Jose Mission**, Texas, 6-197  
**San Juan**, capital of Puerto Rico, 7-80, \*81  
**San Juan Teotihuacan**, Mexico, pyramid at, 7-11  
**San Julian**, town of Andorra, 2-293  
**San Luis Rey**, mission in California, 6-286  
**San Marino**, oldest state in Europe, 2-285, 286-87, \*\*292  
**facts and figures**, 2-294  
**San Marino**, capital of San Marino, 2-287  
**San Martin**, Jose de, Argentine hero, 7-200  
**San Pedro**, oases, Chile, 7-133  
**San Remo**, town of Italy, 2-318  
**San Salvador**, capital, El Salvador, 7-33, \*33, 35  
**San Xavier del Bac**, mission church, Arizona, 6-368  
**Sana**, capital, Yemen, 3-378, \*379  
**Sand painting**, Navaho, 6-22  
**Sandakan**, town of Borneo, 5-264  
**Sandwich Islands**, *see* Hawaii  
**Sandy Beach**, Alberta, 6-418  
**Sangay**, Mount, volcano in Ecuador, 7-109  
**Santa Fé**, capital of New Mexico, 6-185, 361, 364, \*364  
**Santa Fé Trail**, 6-288  
**Santa Maria**, Columbus' flagship, 7-271  
**Santa Maria**, volcano in Guatemala, 7-25  
**Santa Martina e Luca Church**, Rome, 2-341  
**Santa Monica**, California resort section, 6-322  
**Santacruzán**, Philippine religious spectacle, 5-318  
**Santiago**, capital, Chile, 7-136-39, \*140, 143, 145  
**Santiago**, port of Cuba, 7-49, \*\*54  
**Santo Domingo (Ciudad Trujillo)**, capital of Dominican Republic, 7-89-93  
**Santo Domingo**, republic, *see* Dominican Republic  
**São Miguel**, Azores Islands, 1-158  
**São Paulo**, city, Brazil, 7-149, \*158, 159, \*162, 163  
**São Paulo**, state, Brazil, 7-149, 151, 163  
**São Salvador**, city of Brazil, *see* Bahia  
**São Thomé (St. Thomas Island)**, west of Africa, 1-170, 176  
**Sacne River**, France, 1-248  
**Sarawak**, state in Borneo, 5-257, 261, 264, \*267  
**Sardine fishing**, New Brunswick, 6-54  
**Sardinia**, island in Mediterranean, 1-372, \*376, \*377  
**facts and figures**, 1-383  
**Sargon II**, Assyrian king, palace of, 3-221  
**Saskatchewan**, province, Canada, 6-40, 97-109, \*113, \*114, 131, 134, \*138  
**national parks**, 6-401, 412, 416, \*420  
**provincial parks**, 6-428  
**facts and figures**, 6-120  
**Saskatchewan River**, Canada, 7-97  
**Saskatoon**, city of Saskatchewan, Canada, 6-134, \*138  
**Sassanidae**, kings of ancient Persia, sculptures of, 3-206  
**Sasstown**, Liberian seaport, 5-135  
**Saturn**, temple of, Rome, 2-341  
**Saudi Arabia**, *see* Arabia  
**Sault Ste. Marie**, town in Ontario, Canada, 6-96  
**Sault Ste. Marie River**, Canada, 6-81, 85, \*\*91  
**Savannah**, city of Georgia, 6-337-38, \*341  
**Savannah River**, hydrogen-bomb project, 6-243  
**Savona**, port, Italy, 2-308  
**Saxons**, conquest of England by, 1-21, 24  
**in Rumania**, 3-125  
**sculpture**, 1-38  
**Scanderbeg (George Castriot)**, hero of Albania, 3-46  
**Scandinavia**, *see* Denmark; Norway; Sweden  
**Schaumburg-Lippe**, Germany, costume, 2-127  
**Schools**, *see* Colleges and universities; Education  
**Schuman Plan (European Coal and Steel Community)**, 1-262; 2-138  
**Scilly**, Isles of, 1-43  
**Scotch**, settlers in Canada, 6-44, 97  
**Scotland**, 1-19, 97-124  
**map**, 1-35  
**facts and figures**, 1-124  
***See also* Great Britain**  
**Scott, Robert F.**, Antarctic explorations, 7-223-24  
**Scott, Sir Walter**, memorial, Edinburgh, 1-105  
**Seals**, 6-14; 7-235  
**Seattle**, city of Washington, 6-372, \*375  
**Secretariat**, of the United Nations, 7-237, 240  
**Security Council**, of the United Nations, 7-237-38  
**Segovia**, Spain, 1-313  
**Seine River**, at Paris, 1-296-97  
**Seljalandsfoss**, waterfall, Iceland, 2-85  
**Seljuks**, medieval people of Asia Minor, 3-247-48  
**Selkirk, Lord**, Scotch explorer, 6-97

# ALPHABETICAL INDEX

- Selkirk Mountains**, Canada, 6-107  
**Seminoles**, American Indians, 6-24-25, \*\*27  
**Senegal**, French Africa, 5-19, 25, \*28, \*30, \*31  
 facts and figures, 5-32  
**Senj**, town of Yugoslavia, 3-73  
**Sennar Dam**, Sudan, 5-128  
**Seoul**, capital of Korea, 4-381, 382  
**Sequoia Park**, preservation of trees, 6-378, 380  
**Serbia**, part of Yugoslavia, 3-57, 61, 68, 69,  
 \*\*71, \*72, \*73, \*76, 79; 7-303  
 map, 3-60  
**Seris**, Indians of Mexico, 7-4  
**Serra, Father Junipero**, Franciscan missionary  
 to United States, 6-281  
**Serra, Miguel José**, Franciscan monk, 6-286  
**Setesdal**, Norwegian valley  
 costume, 2-12  
**Seven Sisters**, chalk cliffs, England, 1-54  
**Seven Sisters Falls**, Iceland, 2-85  
**Severus**, emperor of Rome, arch of, 2-341  
**Seville**, city, Spain, 1-312, \*216, \*328  
**Seychelles Islands**, 5-159, 163, 172  
**Seydisfjörður**, town of Iceland, 2-86  
**Shackleton, Sir Ernest**, Antarctic explorations,  
 7-223-24  
**Shah Jehan**, Mogul emperor, buildings of,  
 4-30, \*\*31, \*\*38, \*\*44, \*\*45  
**Shakespeare Memorial Theater**, England, 1-  
 \*\*58  
**Shanghai**, city, China, 4-261, \*277  
**Shannon River**, Ireland, 1-155  
**Sharavati River**, India, 7-349  
**Sharon**, Israel, 3-323  
**Sheep-raising**, Afghanistan, 4-4  
 Andorra, 2-286  
 Argentina, 7-207, \*\*212  
 Australia, 5-328, \*329, 339  
 Basque country, Spain, 1-329  
 Bosnia, 3-59  
 Bulgaria, 3-91  
 Chile, 7-138  
 curing karakul skins, Iraq, 3-239  
 England, 1-34, 37  
 Finland, 2-54  
 Georgian Republic, 3-192  
 India, 4-116  
 Israel, 3-325  
 Jordan, 3-340  
 Kashmir, 4-116  
 Madagascar, 5-214  
 New Zealand, 5-361, 367  
 Pakistan, 4-80  
 Russia, 3-141  
 Scotland, 1-100, 104-05, 124  
 Spain, 1-308  
 Turkey, 3-249  
 United States, 6-222, 292, 363  
 Uruguay, 7-193  
**Sheiks**, headmen of Bedouins, 3-351, 358  
**Shell merchant**, Pakistan, 4-70  
**Shetlands**, islands near Scotland, 1-117; 7-  
 \*\*355  
**Shites**, Mohammedan sect, 3-230, 238, 365, 373  
**Shintoism**, religion in Japan, 4-342, 360, \*361  
**Shinyanga**, town, Tanganyika, 5-158  
**Ship Island**, Mississippi, lighthouse, 6-232  
**Ship Rock Peak**, New Mexico, 6-276  
**Shipbuilding**, Canada, 6-44, \*53  
 Scotland, 1-100, \*109  
 Sweden, 2-43  
*See also Boats*  
**Ships and shipping**, Albania, 3-54  
 Australia, 5-345  
 Denmark, 2-94, 97  
 England, 1-40, \*53  
 France, 1-285  
 Germany, 2-111, 138  
 Ireland, 1-140, \*151, \*154  
 Japan, 4-356  
 Norway, 2-18  
 on Mississippi River, 6-347  
 Quebec, 6-72  
 Singapore, 4-187  
 Sudan, 5-128  
 U.S.S.R., 3-155  
 United States, 6-375; 7-221, \*228  
 clipper ships, 7-275  
 early ocean travel, 6-167  
 Uruguay, 7-194  
**Shipshaw**, Quebec  
 power house, 6-73  
**Shoemaking**, Italy, 2-317  
 Turkestan, 3-174  
**Shoguns**, military rulers, Japan, 4-337, 340, 344,  
 348-49, 352, 356  
**Shottery**, England, Anne Hathaway's cottage  
 at, 1-40  
**Showboats**, 6-183-84  
**Shwe Dagon**, pagoda, Rangoon, Burma, 4-157,  
 \*158  
**Siam (Thailand)**, 4-197-212  
 map, 4-197  
 facts and figures, 4-212  
**Siberia**, Russia, 3-148, \*150, \*151, 152, 155, 162;  
 7-310, 337  
**Sicilian Vespers**, 2-377-78  
**Sicily**, 2-371-84  
**Sidon**, city of Lebanon, 3-308  
**Siebenburgen (Transylvania)**, 3-119  
**Siena**, city, Italy, 2-324  
**Sierra Leone**, British Africa, 5-142, 147, 150  
 facts and figures, 5-172  
**Sierra Nevada Mountains**, United States, 6-276  
**Sigurðsson, Jon**, statesman of Iceland, 2-67  
**Sikhs**, Hindu sect, 4-95  
 Golden Temple, Amritsar, 4-69  
**Silesia, Lower**, Czechoslovakia, 2-201  
**Silesia, Upper**, Poland, 2-201  
**Silk culture**, Bulgaria, 3-104  
 China, 4-273, 277  
 India, 4-62  
 Japan, 4-344  
 Lebanon, 3-318  
 Manchuria, 4-285  
 Russian Azerbaijan, 3-196  
**Silk industry**  
 Japan, 7-363  
 Kashmir, 4-105  
 Lyons, France, 1-253  
 Spain, 1-319  
**Silone, Ignazio**, 2-316, 320  
**Silver**  
 Bolivia, 7-129  
 Mexico, 7-14  
 Perú, 7-119  
 Western United States, 6-292-93  
**Silver-fox farming**, Canada, 6-60  
**Simla**, resort, India, 4-46, \*54  
**Simplon Pass**, Switzerland, 7-318  
**Sinai Peninsula**, desert, 7-336  
**Sind**, part of Pakistan, 4-82, \*85  
**Singapore**, Malaya, 4-185, \*186, 189, \*190  
 facts and figures, 4-196  
**Singing Tower**, Florida, 6-244  
**Sinkiang (Chinese Turkestan)**, 4-289-302  
 map, 4-289  
**Sinn Féin movement**, Ireland, 1-140  
**Sioux**, American Indians, 6-25, \*\*30  
**Sir Donald, Mount**, British Columbia, 6-107  
**Sisal fiber**, 5-166  
 Cuban plantation, 7-48  
 Tanganyika plantations, 5-158  
**Sisteron**, town in France, 1-244  
**Sitka**, port of Alaska, 6-311  
**Siva**, Hindu god, India, 4-112, 225  
**Skagway and Lynn Canal**, Alaska, 6-315  
**Skiing**  
 Argentina, 7-210  
 Canadian Rockies, 6-414  
 Lebanon, 3-320  
 New York State, 6-216  
 Sweden, 2-34, 35, 39, 43  
 Switzerland, 2-256  
**Skin diving**, 5-294-95  
**Skoplje**, Yugoslavia, 3-65  
**Skyscrapers**, in United States, 6-317, \*317, \*328,  
 \*329, \*330, \*333, \*347, \*351, \*354, \*373  
**Slate quarry**, Wales, 1-90  
**Slave labor**, Siberia, U.S.S.R., 3-155  
**Slavonia**, part of Yugoslavia, 3-57, 69, 74  
 map, 3-60  
 facts and figures, 3-80  
**Sleigh**, and sled, transportation, 6-153-54  
**Sligo, County**, Ireland, 1-149  
**Slovakia**, 2-201, \*210, 216  
**Slovenia**, part of Yugoslavia, 3-77  
**Smith, Captain John**, American colonist,  
 statue, 6-157  
**Smyrna**, *see* Izmir

# ALPHABETICAL INDEX

- Smyrna fig cultivation**, Turkey, 3-\*257  
**Snakes, charmers**, 4-166  
 Cuba, 7-80  
 India, 4-\*33, 50  
**Snaferu**, king of Egypt, pyramid of, 5-\*84  
**Social relationships**  
 Egypt, 5-98  
 Italy, 2-316, 320  
 Pacific islands, 5-292-93  
**Social security**, Belgium, 1-211  
 Denmark, 2-106-07  
 Egypt, 5-104  
 France, 1-256, 261  
 Iceland, 2-69  
 New Zealand, 5-371-72  
**Society Islands**, 5-\*276, \*279  
 facts and figures, 5-301  
**Sod house**, United States prairies, 6-\*179  
**Soerabaya** (at present Surabaya), town in Java, 5-237  
**Soerlandet**, southern Norwegian coast, 2-10  
**Sofia**, capital of Bulgaria, 3-81, 83, \*86, \*87, \*88, \*89  
**Sogne Fiord**, Norway, 2-14, 18-19  
**Soil**  
 Pacific islands, 5-276, 288  
 Paraguay, 7-171  
 reclamation, Netherlands, 1-180-81, \*184, \*199  
 Uruguay, 7-187  
**Sokols**, Czech societies, 2-200  
**Sokotra Island**, Arabia, 3-383  
**Solo** (Soerakarta), state in Java, 5-237  
**Solomon Islands**, Pacific Ocean, 5-\*302, \*303; 7-265, \*\*281  
 facts and figures, 5-301  
**Somali**, African tribe, 5-\*162  
**Somaliland, British**, Africa, 5-159  
 facts and figures, 5-172  
**Somaliland, French**, Africa, 5-19, \*26, \*27, 32  
 facts and figures, 5-32  
**Somerziemi**, region of Finland, 2-\*56  
**Somers**, town of New York, 7-\*375  
**Soochow**, China  
 pagoda, 4-\*275  
**Socengookween River**, Borneo, 5-\*261  
**Sorbonne University**, Paris, 1-292  
**Sorbs**, people of Eastern Germany, 2-140  
**Sorgue River**, France, 1-\*250  
**Sorrento**, city of Italy, 2-\*311  
**Sound, The**, strait between Denmark and Sweden, 2-97  
**South Africa**, Union of, *see* Union of South Africa  
**South America**. For list of articles, *see* Table of Contents, Volume VII  
 map, 7-\*94  
**South Bend**, city of Indiana, 6-350, 352  
**South Carolina**, state, 6-\*239, 243  
 cities, 6-337, \*340  
 Fort Sumter, 6-\*237  
 facts and figures, 6-248  
**South Dakota**, state, 6-\*189, \*\*267, \*269, 392-93  
 cities, 6-362  
 facts and figures, 6-265  
**South Downs**, English district, 1-34, \*34, 37  
**South Ingonish**, Nova Scotia, harbor, 6-\*427  
**South Island**, New Zealand, 5-\*358, \*368, \*372  
**South Pass**, through Rocky Mountains, 6-284  
**South Pole**, lands near, 7-221-36  
**South Sea islands**, *see* Pacific islands  
**South Vietnam**  
 map, 4-\*217  
*See also* Vietnam  
**South-West Africa**, 5-206, \*207, 210  
**Southampton**, port of England, 1-38, \*53  
**Southern lights**, 7-231  
**Southern Rhodesia**, Africa, 5-169, 171, 195, 201  
 facts and figures, 5-172  
**Southern States**, United States, 6-225-48  
 cities, 6-337-49  
 facts and figures, 6-248  
**Soviet Union (Russia)**, 3-128-62  
 Armenia under, 3-186  
 Turkestan part of, 3-163, 166  
**Spain**, 1-305-44; 7-\*2298, \*\*299  
 cave-men's paintings, 7-249, \*\*250  
 conquests in America, 7-9, 46, 117, 119  
 control of Netherlands, 1-185  
 influence in Central America, 7-28  
 influence in Mexico, 7-9, 11  
 influence in Pacific, 5-286  
**Spain (continued)**:  
 influence in South America, 7-95, 99  
 Argentina, 7-199  
 Chile, 7-133  
 Colombia, 7-108  
 Paraguay, 7-172-75, 179  
 map, 1-\*344  
 Portugal once part of, 1-345  
 possessions, Africa, 5-188  
 Balearic Islands, 1-369, \*\*371, \*382, 383  
 Canary Islands, 1-\*171  
 islands in Atlantic Ocean, 1-\*162, \*164, 176  
 protectorate of Morocco, 5-8, 15  
 settlements in North America, 6-284  
 war with United States, 7-43  
 facts and figures, 1-344  
**Spalt**, village in Germany, 2-\*131  
**Spaniards**  
 in New Mexico, 6-281  
 in South America, 7-105  
*See also* Spain  
**Spanish Town**, Jamaica, 7-\*71  
**Sparta**, city-state of ancient Greece, 3-7, \*\*12  
**Spear fishing**, Pacific, 5-\*280, 294  
**Sphinxes**, Egypt, 5-79-90, \*83  
**Spinning and weaving**, *see* Weaving and spinning  
**Spitsbergen**, Norwegian territory, 2-5  
**Spokane**, city of Washington, 6-372  
**Sponge diver**, Turkey, 3-\*255  
**Sponge industry**, Cuba, 7-\*47  
**Sports**, Alaska, 6-316  
 Argentina, 7-210, \*210, 217, \*220  
 Australia, 5-\*339, \*345  
 Belgium, 1-227-28  
 China, 4-\*295  
 Cuba, jai alai, 7-\*52  
 Egypt, 5-\*93, 101  
 France, 1-236  
 golf, Canada, 6-\*415  
 Hawaii, 6-\*309  
 Helsinki, Finland, stadium, 2-\*66  
 Japan, 4-\*349  
 Lebanon, 3-\*320  
 New Zealand, 5-\*368  
 skiing, Canadian Rockies, 6-\*414  
 South Africa, 5-\*205  
 Sweden, 2-\*34  
 Turkey, 3-259-60, \*284  
 United States, 6-\*216, \*250, \*295  
 California, 6-\*384  
**Spreevald**, district of Germany, 2-\*135  
**Springfield**, capital of Illinois, 6-\*352, 353  
**Springfield**, city of Massachusetts, 6-324, \*324  
**"Squeeze"**, old Chinese custom, 4-329  
**Srinagar**, capital, Kashmir, 4-\*107, \*109, \*113, \*115  
**Srirangam**, India, temple, 4-\*53  
**Stabbur**, Norwegian storehouse, 2-\*8  
**Stadiums**, Athens, Greece, 3-\*30  
 Lisbon, Portugal, 1-\*353  
**Stagecoaches**, 6-167-69, 193  
**Stalin (Varna)**, Bulgaria, 3-\*101  
**Stalin Allee**, avenue in Berlin, 2-147, \*150  
**Stalingrad**, city in Russia, 3-\*142  
**Stanley, Henry M.**, African explorer, 5-173, 180, 185  
**Stanley Park**, Vancouver, Canada, 6-\*41, \*142  
**Stavanger**, city of Norway, 2-15  
**Stave churches**, Norway, 2-7, \*\*21  
**Steamboats**, Mississippi River, 6-181-83  
**Steamships**, 7-272, 275, 279, 282  
**Steel**, Belgium, 1-218  
 Canada, 6-\*134  
 France, 1-262  
 plant, Australia, 5-\*333  
 plant, Youngstown, Ohio, 6-\*265  
 used in shipbuilding, 7-275, 279  
 Wales, 1-93  
**Sterling**, North Dakota, school, 6-\*268  
**Stern wheeler**, on Wisconsin River, 6-\*256  
**Sternberg**, Baron Ungern, pirate, 2-178  
**Sting rays** (fish), 5-\*357  
**Stockholm**, capital of Sweden, 2-26-27, 32, \*38, \*42, 47  
**Stockton**, city of California, 6-368  
**Stone Age**, 7-261  
 pictures by cave men, 7-249, \*249, \*\*250, 253  
**Stone Mountain**, Georgia, carved pageant of the Confederacy, 6-\*225  
**Stonehenge**, England, ruins, 7-\*260, 261

# ALPHABETICAL INDEX

- Stonemasons**, Pakistan, 4-83  
**Stones**, of the Druids, in Brittany, 1-269-70  
**Straits Settlements**, 4-185  
**Strasbourg**, city of France  
   cathedral, 1-239  
**Stratford**, city, Ontario, 6-135  
**Stratford-on-Avon**, England, 1-558  
**Strathcona Provincial Park**, Vancouver Island, 6-430  
**Straw articles**, woven, Italy, 2-325  
**Stromboli**, volcano, Lipari Islands, 7-385  
**Submarines**, 7-279, \*279, 282  
**Subways**, London, used as air-raid shelters, 1-81  
   Moscow, 2-158  
   Tokyo, 4-367  
**Sudan**, 5-89, 127-30  
   map, 5-127  
   facts and figures, 5-130  
**Sudan, French**, 5-23, \*27  
   facts and figures, 5-32  
**Sudbury**, Ontario, minerals, 6-92  
**Sudd**, marsh region, Sudan, 5-128  
**Suez Canal**, 5-93, \*94, 121  
**Sugar-beets**, Canada, 6-108  
   Czechoslovakia, 2-211  
**Sugar industry**  
   Hawaii, 6-308, \*308  
   maple sugar  
     Vermont, 6-210  
   South Africa, 5-206, 210  
   West Indies, 7-68, \*73, 74, 91  
   Cuba, 7-43, 47, \*49, \*50  
**Sugar Loaf**, mountain, Rio de Janeiro, 7-160  
**Suk el Giuma**, Libya, 5-52  
**Sukiran**, Okinawa Island, 4-363  
**Sukkertoppen**, town of Greenland, 2-70  
**Sultan Ahmet Mosque**, Istanbul, *see* Blue Mosque  
**Sultan Hasan**, mosque of, Cairo, 5-120  
**Sumatra**, Indonesia, 5-229, \*233, \*241, 245, 252-53, 256  
**Sumerians**, ancient people of Asia, 3-217, 221; 7-256  
**Sumner Beach**, New Zealand, 5-373  
**Sumptitan**, weapon, *see* Blow-pipe  
**Sun**, midnight sun, 2-224  
**Sun Valley**, Idaho, 6-295  
**Sun Yat-sen**, Chinese patriot, 4-252  
**Sunda Islands**, 5-238, \*\*239, \*241, \*\*243, \*\*246, \*\*247, \*\*251, \*\*254  
**Sundsvall**, timber section, Sweden, 2-32, 35  
**Sungkiang**, town of China, 4-274  
**Sunnis**, Mohammedan sect, 3-232, 297, 312, 365  
**Superior**, Lake, 6-81  
**Supreme Court Building**, Ottawa, 6-130  
**Surabaya (Soerabaya)**, town of Java, 5-228, 237  
**Surf riding**, Hawaii, 6-309  
**Surinam**, Dutch Guiana, 7-96, \*96, \*97, \*99  
**Susa**, Persia, tiles from, 7-2259  
**Susquehanna River**, Pennsylvania, 6-220  
**Sutter's Mill**, Sacramento, California, 6-196  
**Suva**, capital, Fiji Islands, 5-288  
**Svalbard**, Norwegian territory, 2-5  
**Svolvaer**, Lofoten Islands, Norway, 2-22  
**Swahili**, African language, 5-158  
**Swahilis**, people of Zanzibar, 5-164, \*\*165  
**Swan Tavern**, Yorktown, Virginia, 6-169  
**Swannanoa River**, North Carolina, 6-226  
**Swansea**, port, Wales, 1-94  
**Swaziland**, South Africa, 5-206  
   For Facts and Figures, *see* Statistical Summary, 5-210  
**Sweden**, 2-24-47, 49  
   map, 2-26  
   facts and figures, 2-47  
**Swift, Jonathan**, 1-140  
**Swiss Guards**, in French Revolution, 2-271  
   Vatican, 2-344  
**Switzerland**, 2-253-76; 7-318, \*322  
   map, 2-257  
   facts and figures, 2-276  
**Sword dances**, Scotland, 1-101  
**Sydney**, city of Australia, 5-336, \*339, 340  
**Sydney Harbor Bridge**, Sydney, Australia, 5-343  
**Syracuse**, city of Sicily, 2-381  
**Syria, Republic of**, 3-286-304; 5-60  
   facts and figures, 3-304  
**Szczecin (Stettin)**, city of Poland, 2-167  

## T

**Taal, Lake**, Philippine Republic, 7-388  
**Tabernacle**, Mormon, Utah, 6-367  
**Taboos**  
   in Pacific, 5-286  
**Tadoma**, city of Washington, 6-372  
**Tadoussac**, village in Quebec, 6-71  
**Tadzhik Soviet Socialist Republic**, 3-169  
   facts and figures, 3-180  
**Tagus River**, Portugal, 1-346, \*350  
**Tahiti**, one of Society Islands, 5-279  
**Taiga**, region of Asia, 7-310  
**Taihuoku**, *see* Taipei  
**Taipei**, capital of Formosa, 4-236, \*237, \*240  
**Taiwan**, *see* Formosa  
**Taj Mahal**, tomb, India, 4-445  
**Takkakaw Falls**, British Columbia, Canada, 6-398  
**Taklamakan Desert**, Chinese Turkestan, 4-289  
**Talara**, port of Peru, 7-121  
**Tallinn (Revel, or Reval)**, capital of Esthonia, 2-174, \*178, \*181, 184, 187  
**Tallylyn, Lake**, Wales, 1-86  
**Tamerlane**, Mongol ruler, 3-163, 289  
**Tamils**, people of Ceylon, 4-165, \*\*174, \*\*175  
**Tammer Rapids**, Finland, 2-60  
**Tampa**, city of Florida, 6-338  
**Tampere**, city of Finland, 2-60  
**Tananarive**, capital, Madagascar, 5-218, \*220, \*221, \*222  
**Tanganyika**, territory, Africa, 5-158, \*166, 172  
**Tanganyika, Lake**, 5-158  
**Tangier Zone**, Morocco, 5-8, \*11, 18  
**Tannin**, from quebracho bark, 7-172, 182  
**Taoism**, religion in China, 4-257, \*324  
**Taormina**, Sicily, 2-372, \*383; 7-3391  
**Tapa**, Pacific bark cloth, 5-229  
**Tapestry-weaving**, Beauvais, France, 1-236  
**Tar industry**, Finland, 2-53  
**Tarawera**, Mount, New Zealand, 5-362  
**Tarascon**, town of France, 1-263  
**Tarn River**, France, 7-325  
**Taro**, Pacific vegetable, 5-288-89  
**Tarsiers**, Borneo, 5-266  
**Tashi Lama**, sacred teacher, Tibet, 4-120  
**Tashkent**, city of Turkestan, 3-169, 176  
**Tasman, Abel**, 5-359  
**Tasmania**, state of Australia, 5-342, \*346, \*347  
**Tatar Wall**, Peking, 4-317, 321  
**Tatars**, people of Azerbaijan, 3-129, 194, 196; 4-252  
**Tatras**, High, mountains in Czechoslovakia, 2-216  
**Tattooing**, Maori, 5-378, \*381  
**Taverns**, *see* Inns  
**Taxco**, town of Mexico, 7-11  
**Taxila**, ruined city, Pakistan, 4-96  
**Te Moana-Nui-a-kiwa-Ngarimu**, Maori World War II hero, 5-384  
**Tea**, Australia, 5-328  
   Ceylon, 4-166, \*\*171  
   China, 4-277  
   Georgian Republic, 3-195  
   Java, 5-227  
   South Africa, 5-206  
**Teakwood**, from Indochina, 4-229  
**Tegucigalpa**, capital of Honduras, 7-28  
**Tehama desert**, Arabia, 3-379  
**Teheran**, capital of Iran, 3-208, \*209  
**Tehuelches**, tribe of Patagonia, 7-151  
**Tel Aviv-Jaffa**, port, Israel, 3-323, \*328  
**Telemark**, region in Norway, 2-8, 10, 14  
**Tell-el-Amarna**, town of Egypt, 5-65  
**Tema**, port, Gold Coast, 5-145  
**Temagami, Lake**, Ontario, Canada, 6-84  
**Temple**, Buddhist, Ceylon, 4-176  
**Temple**, Chinese, Penang, 4-188  
**Temple**, Hindu, Jaipur, India, 4-32, \*51  
**Temple**, Mormon, Utah, 6-367  
**Temple of Ammon**, Egypt, 5-64  
**Temple of Angkor Wat**, Cambodia, 4-222  
**Temple of Castor and Pollux**, Rome, 2-347  
**Temple of Hathor**, Egypt, 5-63  
**Temple of the Sun**, Bolivia, ruin, 7-129  
**Temple of the Sun**, Carlsbad Caverns, 6-396  
**Temple of the Tooth**, Ceylon, 4-172, \*173, 184; 7-369

# ALPHABETICAL INDEX

- Ten Peaks**, Alberta, 6-\*\*103  
**Tenerife**, Canary Islands, 1-\*\*164  
**Tennessee**, state, 6-\*\*227, 243  
 cities, 6-339, \*339  
 facts and figures, 6-248  
**Tennessee River**, 6-\*\*227, \*228  
**Tennessee Valley Authority (TVA)**, 6-243  
**Tetuan**, capital of Spanish Morocco, 5-\*\*10  
**Texas**, state, 6-197, \*\*231, 236, 246  
 cities, 6-319, 348, \*349  
 facts and figures, 6-248  
**Textiles**, Belgium, 1-218  
 Chile, 7-145  
 Czechoslovakia, 2-198  
 Germany, 2-137  
 Hungary, 2-244  
 India, 4-34  
 Kashmir, 4-110  
 Lyons, France, 1-253  
 Pakistan, 4-80  
 Rumania, 3-114  
 Scotland, 1-112  
*See also Weaving*  
**Thai**, people of Siam, 4-200  
**Thailand**, *see* Siam  
**Thames River**, England, 1-\*\*62, 73, \*\*78, \*\*79, \*81; 7-320  
**Thar Desert**, in Rajputana, India, 7-335  
**Theaters**, in pioneer period, United States, 6-167  
 Ireland, 1-133, 147-48  
**Theater, Elizabethan**, Norwich, England, 1-48  
**Thebes**, ancient Egypt, 5-72, 75  
*See also Tutankhamen*, tomb of  
**Theseion**, temple at Athens, 3-39  
**Theseum**, temple at Athens, 3-41  
**Thessalonike**, Greece, *see* Salonika  
**Thessaly**, Greece, Meteora Monastery, 3-\*\*13  
**Thorney Isle**, of London, 1-73  
**Thothmes III**, king of Egypt, 5-57, 60  
**Thousand Islands**, *see* St. Lawrence Islands National Park  
**Three Forks**, Montana, 6-284  
**Three Sisters**, peaks in Australia, 5-324  
**Throne of Solomon**, peak in India, 4-111  
**Tiahuanaco**, Bolivia, ruins, 7-\*\*123, \*129  
**Tibet**, 4-119-48; 7-269, 335  
 facts and figures, 4-148  
**Tierra del Fuego**, territory, Argentina, 7-138, \*146, \*\*216  
**Tiflis (Tbilisi)**, capital of Georgian Republic, 3-192, \*197  
**Tigris River**, Iraq, 3-\*\*218, \*224, \*\*226, \*234, 237, \*240, \*242  
**Tilikum**, primitive boat, 7-265  
**Timbuktoo (Timbuktu)**, town of Africa, 5-22-23, \*27  
**Timgad**, ruined city of Algeria, 5-33  
**Timur**, *see* Tamerlane  
**Tin**, Bolivia, 7-129  
 Malaya, 4-187  
 Wales, 1-93-94  
**Tinikling**, Philippine dance, 5-319  
**Tipperary, County**, Ireland, 1-\*\*131  
**Tirana**, capital of Albania, 3-48, \*55  
**Tirnov**, city of Bulgaria, 3-\*\*90  
**Titano**, Mount, San Marino, 2-286, \*\*292  
**Titicaca, Lake**, Bolivia, 7-128, 269, \*274  
**Tito**, Marshal, Yugoslav leader, 3-79-80  
**Tlaxcalans**, Indians of Mexico, 7-9  
**Tobacco**  
 Nyasaland, 5-163  
 Southern Rhodesia, 5-169  
 Southern United States, 6-229  
 Turkey, 3-254, \*254  
 West Indies, 7-46, 47, 49, \*\*51, 79  
**Tobago**, island of West Indies, 7-83  
**Todos los Santos, Lake**, Chile, 7-\*\*135  
**Togo**, French trusteeship, Africa, 5-32  
**Togoland**, British Africa, 5-141, 172  
**Tokelau Islands**, Pacific Ocean  
 facts and figures, 5-301  
**Tokyo**, capital of Japan, 4-333, 365-72  
**Tokugawa**, ruling family, Japan, 4-344, 348-49, 352, 356  
**Tolbooth Prison**, Edinburgh, Scotland, 1-\*\*102  
**Toledo**, city of Ohio, 6-251, 350  
**Tolls**, bridges and highways, Wales, 1-85  
**Toltecs**, Indians of Mexico, 7-8  
**Tombs**, Mongolia, 4-310  
**Tombstone**, Arizona, 6-194  
**Tong-king**, Indochina, *see* Tonkin  
**Tonga (Friendly) Islands**, Pacific Ocean  
 facts and figures, 5-301  
**Tongariro National Park**, New Zealand, 5-371  
**Tonkin**, province, Indochina, 4-228, 229, \*230, 232  
 map, 4-217  
**Tooth, Temple of**, *see* Temple of the Tooth  
**Topeka**, capital of Kansas, 6-360  
**Torii**, Japanese gateway, 4-236, \*\*342  
**Tornea**, town of Finland, 2-57  
**Toronto**, capital, Ontario, 6-127-28, \*132, \*133  
**Torres Strait**, between New Guinea and Australia, 5-272  
**Tosks**, people of southern Albania, 3-45  
**Totem poles**, Alaska, 6-304, \*314  
 British Columbia, 6-21  
 Northwest Coast Indians, 6-\*\*31  
 of Australian aborigines, 5-355  
 of Indians, 6-21  
**Tourist trade**  
 Italy, 2-305, 309  
**Tower of London**, England, 1-\*\*66, 73, 80  
 Tower Bridge, 1-\*\*78  
**Town crier**, England, 1-24  
**Toy industry**  
 Japan, 4-345  
 Switzerland, 2-267  
**Trade**, effect on Syria, 3-291  
 ancient routes across Syria, 3-288  
 India, 4-58  
 Indochina, 4-229  
 Italy, 2-305, 309  
 Lebanon, 3-314  
 Pacific islands, 5-300  
 Turkey, 3-275, \*278  
 Uruguay, 7-196  
**Trade winds**, 5-231  
 New Guinea, 5-271  
**Trafalgar Square**, London, 1-\*\*70, 84  
**Trains**, *see* Railroads  
**Trajan**, Roman emperor, 3-105  
**Trajan Forum**, Rome, 2-345  
**Trajan's Column**, Rome, 2-349  
**Trans-Siberian Railroad**, 3-152, 155  
**Transdanubia**, Hungary, 2-239  
**Transportation**, 7-307-16  
 Afghanistan, 4-4  
 Africa, 5-22, \*198  
 Albania, 3-46  
 Andes Mountains, 6-178; 7-132  
 Antarctica, 7-224, \*233, \*234  
 Arabia, 3-336, \*375, 380  
 Argentina, 7-203, 217  
 Belgium, 1-207, 225  
 Brittany, 1-270  
 Canada, 6-47, 124-25, 134-36, 142, 150  
 British Columbia, 6-109  
 Manitoba, 6-136  
 Newfoundland, 6-45  
 Northwest Territories, 6-151  
 Canary Islands, 1-162  
 Central America, 6-174; 7-28  
 Ceylon, 4-166, \*169, 176, \*177  
 Chile, 7-140, 146  
 China, 4-292, 305, \*320, 329, \*332  
 Chinese Turkestan, 4-289  
 Colombia, 7-105  
 Egypt, 5-97  
 Eritrea, 5-137  
 Ethiopia, 5-133  
 Formosa, 4-240, \*243  
 Germany, 2-115, 150  
 Greece, 3-11  
 Greenland, 2-69  
 Iceland, 2-71, \*76  
 in deserts, 3-347-49, 354-55; 7-341  
 India, 4-23, 42  
 Indochina, 4-229  
 Iran, 3-201  
 Iraq, 3-228-29, \*240, \*245, 246  
 Ireland, 1-125, \*141, \*148, \*154  
 Israel, 3-324, \*\*332  
 Japan, 4-367  
 Jordan, 3-339  
 Kashmir, 4-116  
 Korea, 4-380  
 Lebanon, 3-308  
 Libya, 5-35  
 Madagascar, 5-218, \*221  
 Madeira, 1-159



# ALPHABETICAL INDEX

## Transportation (continued):

- Manchuria, 4-283, 285
  - Mexico, 7-14-15
  - Mongolia, 4-312
  - Netherlands, 1-194, 195, 198
  - Nigeria, 5-146
  - North Africa, 5-48
  - Norway, 2-10
  - Nova Scotia, 6-58
  - Pacific islands, 5-285, 296, 300
  - Pakistan, 4-82, 96
  - Paraguay, 7-180
  - Peru, 7-120
  - Philippines, 5-313, 315-16, 320
  - Portugal, 1-354, 3362
  - Russia, 3-135, 139, 152, 155, 158
  - Sinkiang (Sin-Kiang), 4-291
  - Singapore, 4-186
  - South Africa, 5-200
  - Spain, 1-337
  - Sudan, 5-129
  - Switzerland, 2-264, 271
  - Syria, 3-288, 303
  - Thailand, 4-203
  - Tokyo, 4-365
  - Turkestan, 3-172
  - Turkey, 3-259, 278, 279
  - United States
    - cog railroad in Rockies, 6-291
    - Conestoga wagon, 6-178
    - cities, 6-328, 337, 351
    - history, 6-153-200
    - Mormon wagon train, 6-181
    - up Lookout Mountain, 6-339
  - Uruguay, 7-196
  - West Indies, 7-72
  - Yugoslavia, 3-78
  - See also* Air service, Boats, Bridges, Camels, Canals, Donkeys, Elephants, Oxen, Railroads, Roads, Ships
  - Transvaal, province of South Africa, 5-189, 193, 197
  - Transylvania, region of Rumania, 3-107, 110, 111, 116, 118, 119, 120, 121, 125
  - Trapani, province of Sicily, 2-378
  - Traunsee, lake in Austria, 2-222
  - Traunstein, mountain in Austria, 2-222
  - Travancore, state, India, 4-28
  - Travel, *see* Transportation
  - Treaty Ports, China, 4-249
  - "Tree ferns," Australia, 5-324
  - Treforest, trading estate, Wales, 1-92
  - Trinidad, island, West Indies, 7-69, 70, 72, 74
    - facts and figures, 7-83
  - Trinity, Cape, Quebec, 6-79
  - Triple Alliance, War of, South America, 7-179
  - Tripoli, city of Lebanon, 3-317
  - Tripoli, North Africa, *see* Libya
  - Tripoli, one of capitals of Libya, 5-35, 56
  - Tripolitania, *see* Libya
  - Tristan da Cunha, island in South Atlantic, 1-173, 175, 176
  - Troika, Russian vehicle, 3-139
  - Trollhattan Falls, power plant, Sweden, 2-35
  - Tromsø, city of Norway, 2-19
  - Trondheim, city of Norway, 2-18, 19
  - Trossachs, Scotland, 1-119
  - Troyan, town in Bulgaria, 3-100
  - Truk, in Caroline Islands, 5-277, 286, 288, 292
  - Truro, town of England, 1-41
  - Trusteeship Council, of the United Nations, 7-237, 240
  - Tsang-po River, Tibet, 4-120
  - Tsimshian, British Columbia, totem poles, 6-21
  - Tsimshians, American Indians, 6-21
  - Tsushima, Japanese island, 4-348
  - Tuaregs, nomads of Africa, 5-23
  - Tucson, city of Arizona, 6-364, 368
  - Tucuman, Argentine province, 7-203, 218
  - Tundras, marshes in Siberia, 7-337
  - Tungians, tribe of Sinkiang (Sin-Kiang), 4-302
  - Tunis, capital of Tunisia, 3-3360; 5-48, 551
  - Tunisia, 3-3352; 5-39, 42, 45-55
    - facts and figures, 5-56
  - See also* Tunis
  - Tupis, Indians, Brazil, 7-149
  - Tupiza, Bolivia, rock gateway near, 7-131
  - Turkestan, Chinese (Sin-Kiang), 4-289-302
    - map, 4-289
    - Russian, 3-163-80
  - Turkey, 3-247-62
    - attempts to conquer Montenegro, 3-57
    - Bulgarian wars, 3-81, 83
    - conquest of Armenia, 3-184
    - conquest of Iraq, 3-221
    - conquest of Lebanon, 3-305
    - conquest of Rumania, 3-105
    - conquest of Syria, 3-289
    - influence in Albania, 3-46, 48, 53
    - Istanbul, 3-263-85
    - map, 3-248
    - occupation of Egypt, 5-92
    - struggles to obtain Hungary, 2-237
    - facts and figures, 3-262
  - Turks, Asiatic people, 4-290, 300
  - Turkmen Soviet Socialist Republic, For Facts and Figures, *see* Statistical Summary, 3-180
  - Turku (formerly Abo), city of Finland, 2-60, 63
  - Turnavik, fishing village of Labrador, 6-61
  - Tuscany, province, Italy, 2-328
  - Tutankhamen, king of Egypt, 5-61
    - tomb, 5-61, 62, 63, 66, 67, 70
  - Tweed River, Scotland, 1-114, 124
  - Tweeds, Scotch woolens, 1-115
  - Tweedsmuir Provincial Park, British Columbia, 6-429
  - Twin Falls, British Columbia, Canada, 6-99
  - Typhoons, in Formosa, 4-234
    - in Japan, 4-348
  - Tyrol, Austrian, 2-219, 221, 223, 224, 225, 228
- ## U
- Uganda, African territory, 5-152, 155, 158, 166, 167
    - cities, 5-158
    - costumes, 7-296
    - facts and figures, 5-172
  - Ukraine ("Little Russia"), 3-131
    - Kiev, capital, 3-138
  - Ulan Bator, capital, Outer Mongolia, 4-308, 311, 315, 315
  - Ullswater, Lake District, England, 1-51
  - Ulster Province, Ireland, 1-140, 144
  - Umanak, Greenland, 2-71
  - Umanak Fjord, Greenland, 2-84
  - Umiak, Eskimo boat, 7-269
  - Ungava, Quebec, 6-80
  - Union Islands, *see* Tokelau Islands
  - Union of South Africa, 5-189-210
    - facts and figures, 5-210
  - Union of Soviet Socialist Republics, *see* Russia
  - United Kingdom, *see* England, Northern Ireland, Scotland, Wales
  - United Nations, 2-276; 7-237-40
    - Korean conflict, 4-383
    - list of members, 7-240
    - trusteeships
      - Cameroons, British Africa, 5-141
      - in Pacific, 5-293, 296, 297, 301
      - Ruanda Urundi, Africa, 5-177, 179, 188
      - Tanganyika, 5-150
      - Togoland, Africa, 5-141
  - United States
    - Antarctic exploration, 7-221, 224, 226, 226, 227, 228, 228, 229, 232, 233
    - British loyalists move to Canada, 6-85
    - cities, 6-317-75
      - For specific cities, *see* under their names
    - exploration, 6-169, 171-72, 175, 177
    - Fourth of July celebration in Denmark, 2-99, 102
    - help to Haiti, 7-85, 86
    - Indians, 6-17-32
    - India's trade with, 4-84
    - influence on Japan, 4-336-37
    - Liberty Bell, 6-165
    - maps, 6-155, 184
    - national parks, monuments and forests, 6-377-400
    - North Central States, 6-249-71, 350-62
    - Northeastern States, 6-201-24, 323-36
    - Oregon dispute, 6-114
    - repatriation of Negroes, 5-135
    - sailing yachts, 7-272
    - shipbuilding, 7-271, 282

# ALPHABETICAL INDEX

- United States (continued):**  
 Southern States, 6-225-48, 337-49  
 territories  
   Hawaii and Alaska, 6-305-16  
   Pacific islands, 5-282, 283, \*283, 284-88, 292-93, 295, \*295, \*296, \*300, 301  
   West Indies, 7-\*61, \*66, \*67, \*68, 79-83  
   transportation, history, 6-153-200  
   War of 1812, 6-88, 96  
   war with Spain, 7-43  
   Western States, 6-272-304, 363-75  
   facts and figures, 6-200, 224, 248, 265, 294, 316  
   *See also* names of states  
**United States**, Atlantic passenger liner, 7-261  
**United States Naval Academy**, 6-\*335  
**Universities**, *see* Colleges and universities  
**University of Concepcion**, Chile, 7-\*140  
**Unter den Linden**, avenue in Berlin, 2-146  
**Untouchables**, old caste of India, 4-19  
**Upper Town**, city of Quebec, 6-73  
**Upper Volta**, French Africa, 5-19, 32  
**Upper Waterton Lake**, Alberta, 6-\*412  
**Uranium**, Belgian Congo, 5-182  
   Canada, 6-\*40, \*113, \*147, 149  
   mine in Saskatchewan, Canada, 6-\*105  
   prospecting in Australia, 5-\*334  
**Urga**, capital of Mongolia, 4-303, 305, \*311, 315  
**Uruguay**, 7-182-98  
   map, 7-\*184  
   facts and figures, 7-198  
**Ushuaia**, city, Argentina, 7-200, \*\*216  
**Usti**, town of Czechoslovakia, 2-\*208  
**Utrecht**, city of Netherlands, 1-\*200  
**Utah**, state, 6-\*181, \*183, \*195, 273-94, \*300, \*\*398, \*\*399  
   cities, 6-264, \*367  
   Mormon settlement of, 6-177, 179  
   facts and figures, 6-294  
**Uzbeks**, *see* Uzbekistan  
**Uzbekistan**, Soviet republic, Asia, 3-166-78  
   facts and figures, 3-180
- V**
- Vacation lands**, *see* Resorts  
**Vaduz**, capital of Liechtenstein, 2-\*282, 286, \*\*289  
**Val d'Illiez**, Switzerland, women, 2-\*261  
**Valdres**, region of Norway, 2-10  
**Valletta**, capital of Malta, 1-\*375  
**Valley Forge**, Pennsylvania, 6-\*163  
**Valley of the Kings**, Egypt, 5-72, \*\*76  
   *See also* Tutankhamen, tomb of  
**Valparaiso**, port, Chile, 7-136, 137, \*142, 143  
**Van Deusen House**, Kingston, New York, 6-\*166  
**Van Horne Range**, British Columbia, 6-\*111  
**Vancouver, George**, explorer, 6-281, 284  
**Vancouver**, city, British Columbia, 6-\*41, 136, \*141, 142, \*142  
**Vancouver Island**, British Columbia, 6-112, 114, 142-43, \*143  
**Vartan**, Armenian national hero, 3-184  
**Vasco da Gama**, Portuguese explorer, 1-345  
**Vatican City**, 2-294, \*342, \*\*344, 351  
   art treasures of, 2-\*342, 354  
   facts and figures, 2-294  
**Vaudouze**, France, 1-\*250  
**Vendors**, *see* Merchants, street  
**Venezuela**, 7-95-96, 99-104  
   Angel Falls, 7-\*344, 352  
   facts and figures, 7-104  
**Venice**, city of Italy, 2-354-70  
   Albania, once under, 3-46  
   gondolas, 7-\*273  
**Vercheres, Madeleine de**, Canadian heroine, memorial to, 6-\*428  
**Vermont**, state, 6-208, \*\*210, \*220  
   cities, 6-323, \*325  
   facts and figures, 6-224  
**Versailles**, town of France, 1-302  
**Vestmann Islands**, Iceland, 2-67  
**Vesuvius**, Mount, Italy, 7-\*384, 388, \*\*390  
**Vlianden**, village of Luxembourg, 2-\*283  
**Viborg (Viipuri)**, town of Russia, 2-63  
**Victoria**, state of Australia, 5-\*332  
**Victoria**, capital, British Columbia, 6-142-43, \*143  
**Victoria**, city of Hong Kong, 4-\*272  
**Victoria and Albert Museum**, London, 1-\*76
- Victoria Falls**, South Africa, 5-169, 201; 7-343, 345, \*\*346, \*\*347  
**Victoria Institution**, India, 4-\*63  
**Victoria Nyanza (Lake)**, Africa, 5-151, 152, 155, 158  
**Victoria Station**, London, 1-\*81  
**Vienna**, capital of Austria, 2-228, \*234, 235  
**Vietnam**, Indochina, 4-213, \*218, 220, \*230, 232  
   map, 4-\*217  
**Viipuri** (formerly Viborg), town of Russia, 2-63  
**Vikings**, Norse people, 2-19, 22, 25  
   descendants in England, 1-25  
   relics in Greenland, 2-80  
**Villarica**, lake region, Chile, 7-138  
**Villersexel**, town of France, 1-\*238  
**Vilnius (Wilno, or Vilna)**, capital of Lithuania, 2-\*182, 187  
**Vina del Mar**, resort, Chile, 7-\*140  
**Vineyards**, *see* Grapes; Wine  
**Virgin Islands**, in West Indies, 7-61, \*66, \*67, \*68, 74  
**Virginia**, state, 6-\*157, \*168, \*169, \*229, \*\*235, 246  
   cities, 6-\*319, 337  
   Mt. Vernon, home of George Washington, 6-\*187  
   tobacco field, 6-\*229  
   facts and figures, 6-248  
**Virginia City**, Nevada, 6-\*194  
**Visigoths**, barbarians in Europe, 1-305  
**Vistula River**  
   Poland, 2-172  
**Vittskovle Castle**, Sweden, 2-\*29  
**Vitus**, St., legend of, 2-208  
**Vltava River**, Czechoslovakia, 2-201  
**Volcanoes**, 7-384-92  
   Antarctica, 7-231  
   Central America, 7-25, \*\*27, 28, 33, 37  
   Crater Lake, Oregon, 6-383, \*391  
   Ecuador, 7-109  
   formation of Pacific islands, 5-277  
   Hawaii, 6-305, \*\*306, \*307, 312-13, 383; 7-388  
   Iceland, 2-67  
   Lassen Peak, California, 6-273  
   Mexico, 7-\*18  
   Mount Etna, 2-371, \*381; 7-388, \*\*391  
   Mount Vesuvius, 7-\*384, 388, \*\*390  
   New Zealand, 5-360, 362, \*371  
   Philippine Republic, 5-313; 7-\*388  
   Yellowstone National Park, 6-\*387  
**Volendam**, village, Netherlands, 1-\*197  
**Volga River**, Russia, 3-\*144, \*149  
**Volta River**, Gold Coast, 5-145, 147  
**Voodoo**, religion in Haiti, 7-89  
**Vrbas River**, Bosnia, cascades, 7-\*350
- W**
- Wadi Haifa**, city, Sudan, 5-128  
**Wadi Musa**, Arabia, 3-\*366, \*\*367  
**Wagons**  
   Conestoga wagon, 6-162-63, \*178, \*181  
   in colonial days, United States, 6-156, 159  
**Wahhabi movement**, in Mohammedanism, 3-361  
**Waikato River**, New Zealand  
   hydroelectric station, 5-\*366  
**Waikiki Beach**, Hawaii, 6-\*307, \*309  
**Waitangi**, Treaty of, in New Zealand history, 5-379  
**Wakatipu Lake**, New Zealand, 5-\*368  
**Walapais**, American Indians, 6-\*275  
**Walcheren Island**, Netherlands, 1-\*196  
**Wales**, 1-\*18, 85-96; 7-\*294  
   map, 1-\*35  
   facts and figures, 1-96  
   *See also* Great Britain  
**Wales**, Prince of, first, 1-86  
**Wall**, of Peking, China, 4-317, \*320, 321  
**Wall, Hadrian's**, England, 1-46, \*46  
**Wall, the Great**, China, 4-\*250, 252, \*\*278  
**Wallachia**, district of Rumania, 3-105  
**Walloons**, people of Belgium, 1-203, 207  
**Wankie**, township, Southern Rhodesia, 5-169  
**War of 1812**, 6-88, 96  
**Warsaw**, capital of Poland, 2-\*168, \*170  
**Washington**, District of Columbia, capital of United States, 6-\*190, \*\*191, 192  
**Washington**, state, 6-\*198, 273-94, \*297, \*\*302  
   cities, 6-372, \*375

# ALPHABETICAL INDEX

- Washington (continued):**  
 Mount Rainier National Park, 6-388, \*393  
 facts and figures, 6-294  
**Washington Monument**, Washington, D. C., 6-  
 \*190  
**Washington, Mount**, New Hampshire, 6-202  
**Waskana Creek**, Saskatchewan, 6-138  
**Waskesiu Lake**, Saskatchewan, 6-420  
**Wat Phra Keo**, temple in Siam, 4-211  
**Watch towers**, Afghanistan, 4-16  
**Water buffaloes**  
 Philippines, 5-312, \*313  
**Water carrier**  
 Arabian desert, 3-379  
 Cairo, Egypt, 5-109  
 in Saudi Arabia, 3-373  
**Water power**  
 Alabama, 6-228  
 Australia, 5-343  
 Canada, 6-72, \*73, 77, 84, \*113  
 Central African Federation, 5-169, 171  
 Chile, 7-141, 145  
 Finland, 2-58, \*65  
 France, 1-262, 264  
 Gold Coast, 5-147  
 Iceland, 2-68  
 India, 4-66  
 Ireland, 1-155  
 Italy, 2-328  
 Madagascar, 5-216  
 New Zealand, 5-366, 368-69  
 Norway, 2-8  
 Russia, Siberia, 3-155  
 Russian Armenia, 3-189  
 Russian Azerbaijan, 3-196  
 Scotland, 1-108, \*120  
 Sweden, 2-35  
 Uganda, 5-152  
 United States, 6-205, 243, \*252, 273; 7-345, 352  
**Water wheel**  
 Syria, 3-289  
**Waterbury**, city of Connecticut, 6-326  
**Waterfalls**, 7-343-52  
 Australia, 5-322  
 Horseshoe Falls, Niagara, 6-39  
 Iceland, 2-85  
 Iguassu, South America, 7-208-09  
 in national parks, United States, 6-378, \*394  
 Lofot, Belgian Congo, 5-175  
 Takkakaw Falls, Canada, 6-98  
 Yosemite Falls, California, 6-394  
**Waterloo**, site of battle, Belgium, 1-206  
**Waterton Lakes National Park**, Alberta, 6-410,  
 412, \*412, \*415  
**Waterwheel Falls**, Yosemite National Park,  
 6-378  
**Watusi**, people of Ruanda Urundi, 5-179  
**Weald**, English district, 1-38  
**Weather**, *see* Climate  
**Weaving and spinning**, 7-353-67  
 Bolivia and Peru, 7-130  
 England, 1-45  
 Finland, 2-53  
 Formosa, 4-234  
 Germany, 2-137  
 Iran, 3-207  
 Ireland, 1-138  
 Italy, 2-325  
 Java, 5-237  
 Mongolia, 4-308  
 Pakistan, 4-86  
 Paraguay, 7-170, \*178  
 Poland, 2-169  
 Rumania, 3-114  
 Scotch tweeds, 1-115  
 Sumatra, 5-233  
 Sweden, 2-41  
**Wedding customs**, Albania, 3-51, 53  
 Arabia, 3-377  
 Armenia, 3-187  
 China, 4-270, 316  
 Formosa, 4-235, 243  
 France, 1-281  
 Germany, 2-127, \*134  
 Greece, 3-19, \*25  
 Hungary, 2-251  
 Iceland, 2-79  
 Inner Mongolia, 4-304  
 Iran, 3-213  
 Japan, 7-292  
**Wedding customs (continued):**  
 Java, 5-232  
 Korea, 4-380  
 South Africa, 5-201  
 Spain, 1-339  
 Yugoslavia, 3-68, \*68  
**Wellington**, capital of New Zealand, 5-366,  
 \*367, 368  
**Wellington Arch**, London, 1-68  
**Welsh**, meaning of name, 1-88  
**Wends**, people of Eastern Germany, 2-135,  
 140  
**Weser River**, Germany, 2-111  
**West Indies**, 7-43-83, 385  
 Aruba, 7-342  
 Cuba, 7-43-60  
 map, 7-65  
 facts and figures, 7-83  
**West Pakistan**, *see* Pakistan  
**West Point**, United States Military Academy,  
 6-213  
**West Virginia**, state, 6-230  
 cities, 6-237, \*237  
 facts and figures, 6-248  
**Western Australia**, state of Australia, 5-334  
**Western States**, United States, cities, 6-363-75  
**Westminster Abbey**, London, 1-25, \*71, 73  
**Whakarewarewa**, hot springs, New Zealand, 5-  
 \*382, \*383  
**Whales and whaling**, 7-235-36  
 Australia, 5-344  
 Canada, 6-146  
 Iceland, 2-68  
 Scotland, 1-108  
**Wheat growing**, Australia, 5-339  
 Canada, 6-7, 8, 39, \*104  
 France, 1-224  
 Italy, 2-305  
 Pakistan production, 4-79  
 Turkey, 3-254  
 United States, 6-261  
 winnowing, China, 4-292  
**Wheat-pool**, co-operative society, Canada, 6-105  
**Wheeler Dam**, Alabama, 6-228  
**White Mountains**, New Hampshire, 6-208  
**White Nile**, river, 5-127-29, 152  
**White River**, Missouri, ferryboat, 6-266  
**Whitehorse**, capital of Yukon Territory, 6-144  
**Whitney, Mount**, California, 6-380  
**Whyalla**, town of Australia, 5-346  
**Wichita**, city of Kansas, 6-254, 362  
**Wicken Fen**, village of England, 1-42  
**Wiesbaden**, city of Germany, 2-125  
**Wight, Isle of**, 1-38  
**Wilderness Road**, Appalachian Mountains, 6-  
 \*170  
**Wildlife**, Ontario, Canada, 6-84  
**Wilkins, Sir Hubert**, Antarctic explorations,  
 7-224  
**Willamette River**, Oregon, 6-374  
**Willemstad**, Curaçao, hat-making, 7-63  
**William the Conqueror**, 1-267, 274  
**William the Silent**, Netherlands liberator, 1-  
 185  
**Williamsburg**, Virginia, 6-168, \*235  
**Wilmington**, city of Delaware, 6-221, \*336  
**Winchelsea**, town of England, 1-33-34  
**Wind Cave National Park**, South Dakota, 6-392  
**"Wind Wagon"**, Arizona, 7-310  
**Windhoek**, capital of South-West Africa, 5-  
 \*207  
**Windmills**  
 China, 4-282  
 Finland, 2-59  
 Netherlands, 1-178, 180-81, \*184, \*191  
 Poland, 2-165  
**Windsor**, city, Ontario, 6-130  
**Windward Islands**, of West Indies, 7-61  
 facts and figures, 7-83  
**Wine**, France, 1-238, \*245  
 Georgian Republic, 3-191  
 Italy, 2-305, 326, \*326  
 Portugal, 1-359, 362, 363  
 vineyards, Austria, 2-229  
 vineyards, Switzerland, 2-257  
 wine cellars, Spain, 1-336  
**Winnipeg**, capital, Manitoba, 6-109, 112, \*118,  
 131, \*136, \*137  
**Winnipeg, Lake**, Canada, 6-97  
**Wisconsin**, state, 6-254, \*270

# ALPHABETICAL INDEX

## Wisconsin (continued):

cities, 6-264, 357, \*360, \*361  
facts and figures, 6-265  
**Wisconsin River**, the Dells, 6-256  
**Witch doctors**, Uganda, 5-167  
**Wollaton Hall**, England, 1-50  
**Women**, status of, Afghanistan, 4-13

Albania, 3-51  
Angola, 5-174  
Bedouins, 3-349, 351  
Bulgaria, 3-93  
Burma, 4-151  
Egypt, 5-98, \*99, \*100  
Finland, 2-58  
Greece, 3-23  
India, 4-58, \*63, 151  
Iran, 3-211, 213-14  
Israel, 3-336  
Japan, 7-292  
Jordan, 3-345  
Korea, 4-380  
Lebanon, 3-313  
Morocco, 5-99  
Netherlands, 1-194  
Norway, 2-11  
Pakistan, 4-79, \*81  
Philippines, 5-220  
Polynesia, 5-282  
Senegal, 5-31  
Turkey, 3-251, 253  
Wales, 1-92  
Yugoslavia, 3-61  
**Wood Buffalo National Park**, Alberta-North-west Territories, 6-422  
**Wood carving**, Brittany, 1-272  
Germany, 2-129  
Maori, 5-377, \*384  
Quebec, 6-76, 77, 80  
Switzerland, 2-267  
**Wool industry**, Australia, 5-329, 339  
in early England, 1-44  
in the Middle East, 3-229  
Mongolia, 4-308  
Pakistan, 4-80  
Turkey, 3-253  
Union of South Africa, 5-199  
Uruguay, 7-194  
**Worcester**, city of Massachusetts, 6-324  
**Worcestershire**, England, scene in, 1-56  
**World Church of Peace**, Hiroshima, Japan, 4-353

## World War I (1914-18)

Baltic countries (Estonia, Latvia, Lithuania), 2-173  
Belgium, 1-207, 304  
Bulgaria, 3-81  
Persia, 3-199  
Poland, 2-160  
Russia, 3-133, 137  
Turkey, 3-251

## World War I consequences

additions to Rumania, 3-109  
Austria's changes, 2-217  
creation of Yugoslavia, 3-57  
Japanese Empire development, 4-363

## World War II, 1-12; 2-63; 6-309, 314

Albania, 3-56  
Baltic countries (Estonia, Latvia, Lithuania), 2-173, 184  
Belgium, 1-207, 211  
Bulgaria, 3-104  
China, 4-257  
Denmark, 2-107-08  
Estonia, 2-184  
Finland, 2-60  
France, 1-229, 260, \*280, 291, 304  
Germany, 2-109, 111, 145, 151-52, 173  
Great Britain, 1-16-17  
Greece, 3-8  
Hawaii, 6-314  
Iceland, 2-87  
India, 4-73  
Iran, 3-216  
Japan, 4-363-64  
Liberia, 5-140  
Malta, 1-378, \*378  
Morocco, 5-5  
New Guinea, 5-273  
Pacific, 5-283, 285-86  
Palestine, 3-328

## World War II (continued):

Poland, 2-163  
Russia, 3-145, 173  
service of Royal Canadian Mounted Police, 6-104-05  
Siam, 4-212  
Syria, 3-291  
Turkey, 3-260  
Yugoslavia, 3-79-80  
Worms, Germany, market-place, 2-123  
**Wright Brothers Memorial**, N. C., 6-188  
**Wyeth, Nathaniel J.**, explorer, 6-177  
**Wyoming**, state, 6-273-94, \*392, 385-87, \*389  
cities, 6-363, \*368  
facts and figures, 6-294

## X

**Xerxes**, king of Persia, built Persepolis, 7-256  
**Xochimilco**, floating gardens, Mexico, 7-10

## Y

**Yaks**, Himalayas, 4-141  
Tibetan herd and herdsman, 4-130  
**Yakutsk**, city, Siberia, 3-155  
**Yalding**, England, 1-49  
**Yale University**, 6-331  
**Yams**  
Pacific, 5-289  
**Yangtze Kiang**, river of China, 4-258, 273; 7-320  
**Yantra River**, Bulgaria, 3-98  
**Yarkand**, city of Sinkiang (Sin-Kiang), 4-294  
**Yarmouth**, port of Nova Scotia, 6-46  
**Yedo**, former name for Tokyo, Japan, 4-365  
**Yellowknife**, town of Northwest Territories, 6-148, \*149  
**Yellowstone National Park**, 6-377, 383, \*385, \*386, \*387, 393  
**Yemen**, Arabia, 3-379  
Sana, capital, 3-378  
**Yenisei River**, Siberia, 3-152, 155  
**Yeomen of the Guard**, English soldiers, 1-18, 25  
**Yerba mate**, see Mate  
**Yerevan**, capital of Armenia, 3-182, 189  
**Yezidi**, Bedouins, 3-234, 297  
**Yoghurt**, Turkish production, 3-252  
**Yoho National Park**, British Columbia, 6-338, \*98, \*99, \*111, 402-03, \*406, \*407; 7-326  
**Yokohama**, city of Japan, 4-356  
**York**, city, England, 1-43  
**York Minster**, England, 1-57  
**Yorktown**, Virginia, 6-169  
**Yoruba**, African tribe, 5-143  
**Yosemite National Park**, California, 6-378, \*379, \*384, \*394, \*397  
**Young, Brigham**, American Mormon leader, 6-181, 285  
**Youngstown**, Ohio, 6-265  
**Yuan Shih-kai**, first president of China, 4-252  
**Yucatan**, Mexico, pyramid at Chichen Itza, 7-11  
**Yucca**, tropical food plant, 7-106  
**Yugoslavia**, 3-57-80  
gipsies, 7-306  
map, 3-60  
facts and figures, 3-80  
**Yukon Territory**, Canada, 6-5, \*15, 144-52  
facts and figures, 6-152

## Z

**Zagreb**, capital of Croatia, 3-75  
**Zahle**, town of Lebanon, 3-319  
**Zambezi River**, South Africa, 5-169, 171, 201; 7-343, 345, \*346, \*347  
**Zanzibar Protectorate**, Africa, 5-158-59, \*159, \*164, \*165  
facts and figures, 5-172  
**Zealand**, Danish island, 2-94, 97  
**Zeeland**, province, Netherlands, 1-179  
**Zell am Ziller**, Austrian Tyrol village, 2-225  
**Zen Buddhism**, religious sect, Japan, 4-346, 360  
**Zerka River**, Jordan, 3-339  
**Zermatt**, town of Switzerland, 2-271  
**Zeus**, Greek god, temples to, 3-21, 41  
**Zimbabwe**, ruined city of Rhodesia, 7-261, 264  
**Zinc**, British Columbia, Canada, 6-112  
**Zion National Park**, Utah, 6-398  
**Zion Square**, Jerusalem, Israel, 3-330  
**Zobeide**, tomb of, Iraq, 3-225

## ALPHABETICAL INDEX

**Zocalo**, central plaza, Mexico City, 7-5, \*8

**Zomba**, capital, Nyasaland, 5-163

**Zoser**, king of Egypt, pyramid of, Sakkara, 5-87

**Zuider Zee**, Netherlands, 1-\*199

**Zulus**, African people, 5-195, \*198, \*200, \*201, \*204, 206, \*208

**Zuñis**, American Indians, 6-\*\*\*23, \*\*283

**Zurich**, city of Switzerland, 2-\*273

**Zurich, Lake**, Switzerland, 2-\*273